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                 applications updated
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NEWS 18 MAR 31
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                 STN AnaVist, Version 1, to be discontinued
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chain nodes :
9 10 19 20
ring nodes :
1 2 3 4 5 6 11 12 13 14 15 16
chain bonds :
3-9 6-14 6-19 9-10 19-20
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16
exact/norm bonds :
1-2 1-6 2-3 3-4 3-9 4-5 5-6 6-14 6-19 9-10 19-20
normalized bonds :
11-12 11-16 12-13 13-14 14-15 15-16
isolated ring systems :
containing 1 : 11 :

G1:C,O

G2:C,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 9:CLASS 10:CLASS 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 19:CLASS 20:CLASS

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SEARCH TIME: 00.00.03

L2 1318 SEA SSS FUL L1

L3 94 L2

=> d ibib abs hitstr 1-YOU HAVE REQUESTED DATA FROM 94 ANSWERS - CONTINUE? Y/(N):y

L3 ANSWER 1 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2008:337087 CAPLUS Full-text

DOCUMENT NUMBER: 148:393742

TITLE: Identification of 4-(4-Aminopiperidin-1-yl)-7H-

pyrrolo[2,3-d]pyrimidines as Selective Inhibitors of

1318 ANSWERS

Protein Kinase B through Fragment Elaboration

AUTHOR(S): Caldwell, John J.; Davies, Thomas G.; Donald,

Alastair; McHardy, Tatiana; Rowlands, Martin G.; Aherne, G. Wynne; Hunter, Lisa K.; Taylor, Kevin; Ruddle, Ruth; Raynaud, Florence I.; Verdonk, Marcel; Workman, Paul; Garrett, Michelle D.; Collins, Ian

CORPORATE SOURCE: Cancer Research UK Centre for Cancer Therapeutics, The

Institute of Cancer Research, Sutton, Surrey, SM2 5NG,

UK

SOURCE: Journal of Medicinal Chemistry (2008), 51(7),

2147-2157

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB Fragment-based screening identified 7-azaindole as a protein kinase B inhibitor scaffold. Fragment elaboration using iterative crystallog. of inhibitor-PKA-PKB chimera complexes efficiently guided improvements in the potency and selectivity of the compds., resulting in the identification of nanomolar 6-(piperidin-1-yl)purine, 4-(piperidin-1-yl)-7-azaindole, and 4-(piperidin-1-yl)pyrrolo[2,3-d]pyrimidine inhibitors of PKB $\beta$  with antiproliferative activity and showing pathway inhibition in cells. A divergence in the binding mode was seen between 4-aminomethylpiperidine and 4-aminopiperidine containing mols. Selectivity for PKB vs PKA was observed with 4-aminopiperidine derivs., and the most PKB-selective inhibitor (30-fold) showed significantly different bound conformations between PKA and PKA-PKB chimera.

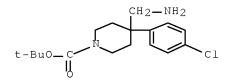
IT 669068-16-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(piperidinyl pyrrolopyrimidines as protein kinase B inhibitors)

RN 669068-16-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-chlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)



REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2008:159036 CAPLUS Full-text

DOCUMENT NUMBER: 148:215065

TITLE: Preparation of heterocyclic urotensin II receptor

antagonists for use in therapy

INVENTOR(S): Ghosh, Shyamali; Kinney, William A.; Lawson, Edward

C.; Luci, Diane K.; Maryanoff, Bruce E.; Sommen,

Francois Maria; Pan, Yongchun

PATENT ASSIGNEE(S): Janssen Pharmaceutica, N.V., Belg.

SOURCE: PCT Int. Appl., 133pp.

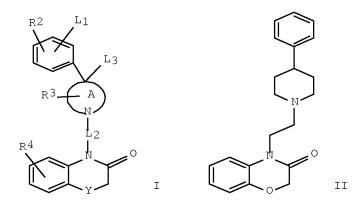
CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	PATENT NO.						DATE			APPL	ICAT	ION I	. O <i>V</i> .		D.	ATE	
WO	2008	0165	34		A1	_	2008	0207		WO 2	 007-1	JS16	806		2	0070	726
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		KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
	MG, MK, MN PT, RO, RS					MX,	MY,	MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,
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	TR, TT, T2					UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW				
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		IS,	ΙΤ,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,
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US	US 20080039454						2008	0214		US 2	007-	8812	68		2	0070	726
PRIORIT	RIORITY APPLN. INFO.:									US 2	006-	8347	20P	]	P 2	0060	731
OTHER SO	HER SOURCE(S):						148:	21506	55								



The invention is directed to Urotensin II receptor antagonists. More AΒ specifically, the present invention relates to certain novel compds. of general formula I (wherein Ring A is piperidinyl, 8-azabicyclo[3.2.1]oct-2enyl, 8-azabicyclo[3.2.1]octyl, or 1,2,3,6-tetrahydropyridinyl; Y is CH2, O and S; L1 is absent or is -C(0)0-R1, etc.; L2 is C1-4alkyl; L3 is absent or is -C(O)N(R5)-R7; R1 is C1-8alkyl, aryl, etc.; R2 is 1-3 substituents selected from H, C1-8alkyl, C1-8alkoxy and halo; R3 is 1-3 substituents from H and C1-4alkyl; R4 is 1-3 substituents selected from H, C1-8alkyl, C1-8alkoxy, OH, and halo; R5 is H and C1-4alkyl; and R7 is C1-8alkyl, aryl, etc.) and methods for preparing compds., compns., intermediates and derivs. thereof. Pharmaceutical compns. and methods for treating or ameliorating a Urotensin-II mediated disorder using compds. of the invention are also described. Example compound II was prepared by reacting (3-oxo-2,3-dihydrobenzo[1,4]oxazin-4yl)acetaldehyde (preparation given) with 4-phenylpiperidine HCl. In an assay measuring inhibition of acetyl-cyclic[Cys-Phe-Trp-Lys-(2-Nal)-Cys]-NH2 induced Ca2+ mobilization (FLIPR) in CHO cells transfected with rat UII receptor, II had an IC50 of 24  $\mu M$ .

IT 1000771-51-6P, 4-(4-Chlorophenyl)-4-(dimethylcarbamoyl)piperidine-1-carboxylic acid tert-butyl ester

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of heterocyclic urotensin II receptor antagonists for use in therapy)

RN 1000771-51-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-chlorophenyl)-4[(dimethylamino)carbonyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

3

L3 ANSWER 3 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:1279243 CAPLUS Full-text

DOCUMENT NUMBER: 148:112275

TITLE: Phenylpiperidine-benzoxazinones as urotensin-II

receptor antagonists: Synthesis, SAR, and in vivo

assessment

AUTHOR(S): Luci, Diane K.; Ghosh, Shyamali; Smith, Charles E.;

Qi, Jenson; Wang, Yuanping; Haertlein, Barbara; Parry, Tom J.; Li, Jian; Almond, Harold R.; Minor, Lisa K.; Damiano, Bruce P.; Kinney, William A.; Maryanoff,

Bruce E.; Lawson, Edward C.

CORPORATE SOURCE: Research & Early Development, Johnson & Johnson

Pharmaceutical Research & Development, Spring House,

PA, 19477-0776, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2007),

17(23), 6489-6492

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 148:112275

GΙ

$$\mathbb{R}^{1}$$

AB Heterocyclyl-substituted aminocarbonylphenylpiperidineethyl benzoxazinones I (R = Boc, Cbz, PhCO, Me3CCH2CO, PhCH2NHCO, PhCH2SO2; R1 = H, C1; X = CH, N; Y = CH2, CH2CH2; Boc = tert-butoxycarbonyl; Cbz = benzyloxycarbonyl) are prepared and tested as human and rat urotensin-II receptor antagonists. I (R = Boc; R1 = C1; X = N; Y = CH2CH2) binds to human and rat urotensin-II receptors with IC50 values of 10 nM and 65 nM, resp. A dose of 2 mg/kg of I (R = Boc; R1 = C1; X = N; Y = CH2CH2) in rats shows a plasma half life of 127 min and a Cmax of 553 ng/mL; when 300  $\mu$ g/kg of I (R = Boc; R1 = C1; X = N; Y = CH2CH2) is administered i.v. to rats 15 min before administration of urotensin-II, the increase in ear temperature associated with administration of urotensin-II is diminished. (aminocarbonyl) (phenyl) piperidineethyl benzoxazinones are prepared and tested as rat urotensin-II receptor antagonists but are less effective than the corresponding (aminocarbonylphenyl) piperidineethyl benzoxazinones.

IT 167263-16-3P 619280-93-2P 619281-13-9P

1000771-51-6P 1000771-52-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of (aminocarbonyl)phenylpiperidineethyl benzoxazinones and their activities as antagonists of rat urotensin-II receptor)

RN 167263-16-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(dimethylamino)carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619280-93-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[(phenylmethyl)amino]carbonyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619281-13-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[(3-phenylpropyl)amino]carbonyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 1000771-51-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-chlorophenyl)-4[(dimethylamino)carbonyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 1000771-52-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[(2-phenylethyl)amino]carbonyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:1275232 CAPLUS Full-text

DOCUMENT NUMBER: 147:522261

TITLE: Preparation of purine and related analogues as ROCK

kinase or protein kinase P70S6K inhibitors

Davies, Thomas Glanmor; Garrett, Michelle Dawn; Boyle, INVENTOR(S):

Robert George; Collins, Ian

PATENT ASSIGNEE(S): Astex Therapeutics Limited, UK; The Institute of

Cancer Research Royal Cancer Hospital; Cancer Research

Technology Limited

SOURCE: PCT Int. Appl., 212pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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									(	GB 2	006-	8179			A 2	0060	425
OTHER S	OURCE	(S):			MAR:	PAT	147:	5222	61								

GΙ

AΒ Title compds. I [T = N or CR5; J1-J2 = N=C(R6), (R7)C=N, (R8)N-C(0), (R8)2C-III = N - III = N - IIIC(0), N=N or (R7)C=C(R6); E = 5- to 6-membered monocyclic carbocyclic or heterocyclic group; Q1 = bond or (un)substituted saturated hydrocarbon linker, one of the C atoms being optionally be replaced by O or N, or an adjacent pair of C atoms may be replaced by CONH, NHCO, etc.; Q2 = bond or (un)substituted saturated hydrocarbon linker, wherein one of the C atoms may optionally be replaced by O or N; G = H, NR2R3, OH or SH with the proviso that when E = arylor heteroaryl and Q2 = bond, then G = H; R1 = H, aryl or heteroaryl, with the proviso that when R1 = H and G = NR2R3, then Q2 = bond; R2 and R3independently = H, (un)substituted hydrocarbyl, acyl, etc.; R4, R6 and R8 independently = H, halo, saturated hydrocarbyl, CN, CONH2, CF3, NH2, etc.; R5 and R7 independently = H, halo, saturated hydrocarbyl, CN, or CF3], and their pharmaceutically acceptable salts, solvates, tautomers or N-oxides thereof, are prepared and disclosed as ROCK kinase or protein kinase P70S6K inhibitors. Thus, e.g., II was prepared by condensation reaction of 4-fluoro-1-(triisopropylsilanyl)-1H-pyrrolo[2,3-b]pyridine with [[4-(4chlorophenyl)piperidin-4-yl]methyl]amine followed by deprotection. Many compds. of the invention showed antiproliferative activity in Alamar Blue assay and were found to have IC50 values of < 25  $\mu\text{M}$ . II exhibited inhibitory activity against ROCK-II and P70S6K with IC50 values of  $< 0.01 \, \mu M$  and 0.03  $\mu M$ , resp. I should prove useful for the treatment or prophylaxis of a disease or condition in which the modulation (e.g. inhibition) of ROCK kinase or protein kinase P70S6K.

IT 669068-16-0P, 4-Aminomethyl-4-(4-chlorophenyl)piperidine-1-carboxylic acid tert-butyl ester 885500-47-0P, 4-(4-Chlorophenyl)-4-[(methylamino)methyl]piperidine-1-carboxylic acid tert-butyl ester

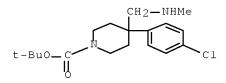
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of purine and related analogs as ROCK kinase or protein kinase P70S6K inhibitor)

RN 669068-16-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-chlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

CN 1-Piperidinecarboxylic acid, 4-(4-chlorophenyl)-4-[(methylamino)methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



ANSWER 5 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:706386 CAPLUS Full-text

DOCUMENT NUMBER: 147:118149

TITLE: Piperidine derivatives as CCR1 antagonists and their

preparation, pharmaceutical compositions and use in

the treatment of CCR1 mediated diseases

INVENTOR(S): Zhang, Penglie; Pennell, Andrew M. K.; Chen, Wei;

Greenman, Kevin Lloyd; Li, Lianfa; Sullivan, Edward

J.; Araldi, Gian-Luca; Rohsheim, Matthew

PATENT ASSIGNEE(S): Chemocentryx, Inc., USA

SOURCE: PCT Int. Appl., 98pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PA	TENT :	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D	ATE	
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		KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,
		MW,	MX,	MY,	MΖ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,
	RU, SC, S					SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,
	UA, UG, U					VC,	VN,	ZA,	ZM,	ZW							
	UA, UG, U RW: AT, BE, B					CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM										
US	2007	0088	036		A1		2007	0419		US 2	006-	5469.	38		2	0061	011
US	2007		A1		2007	0426		US 2	006-	5802	02		2	0061	011		
PRIORIT	Y APP	.:						US 2	005-	7259	80P		P 2	0051	011		
OTHER S	THER SOURCE(S):						147:	1181	49								
GI																	

$$Ar = L^{2} \underbrace{\begin{array}{c} X_{1} \\ X_{2} \end{array}}_{(R^{1})m} \underbrace{\begin{array}{c} X_{1} \\ X_{2} \end{array}}_{L^{1} - B}$$

$$C1$$
 $CN$ 
 $Me$ 
 $CF_3$ 
 $II$ 

AΒ Compds. of formula I are provided that act as potent antagonists of the CCR1 receptor, and have in vivo anti-inflammatory activity. Compds. of formula I wherein R1 is C1-8 (halo)alkyl, C3-6 cycloalkyl, CO2H and derivs., SO2H and derivs., OH and derive., CHO, acyl, CONH2 and derivs., NH2 and derivs., etc.; m is 0 to 4; X1 and X2 are independently (CH2)0-2, wherein at least one of X1 and X2 is other than 0; Ar is (un) substituted heteroaryl; A is H, (hetero)aryl, OH and derivs., CN, NO2, CO2, etc.; B is (un)substituted (hetero)aryl; L1 is a bond, (un)substituted C1-4 (hetero)alkylene, and (un) substituted C2-4 alkenylene; L2 is a bond, C1-3 alkylene, O, NH and derivs., CO, (un) substituted CH2, SO, SO2, etc.; and their pharmaceutically acceptable salts and N-oxides thereof, are claimed. The compds. are generally monocyclic and bicyclic compds. and are useful in pharmaceutical compns., methods for the treatment of CCR1-mediated diseases, and as controls in assays for the identification of competitive CCR1 antagonists. Example compound II was prepared by amidation of (4-chloro-5-methyl-3-trifluoromethylpyrazol-1yl)acetic acid with 4-(4-chlorophenyl)piperidine-4-carbonitrile. All the invention compds. were evaluated for their CCR1 antagonistic activity. From the assay, it was determined that compound II exhibited an IC50 value < 1000

IT 934347-39-4P 934347-40-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of piperidine derivs. as CCR1 antagonists useful in the treatment of CCR1-mediated diseases)

RN 934347-39-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-[4-chloro-5-methyl-3-(trifluoromethyl)-1H-pyrazol-1-yl]acetyl]-4-(4-chlorophenyl)-N-methyl- (CA INDEX NAME)

RN 934347-40-7 CAPLUS

CN

4-Piperidinecarboxamide, 1-[2-[4-chloro-5-methyl-3-(trifluoromethyl)-1H-pyrazol-1-yl]acetyl]-4-(4-chlorophenyl)-N,N-diethyl- (CA INDEX NAME)

$$F_{3}C$$

$$C_{1}$$

$$N_{1}$$

$$C_{1}$$

$$M_{2}$$

$$C_{1}$$

$$M_{3}$$

$$C_{1}$$

$$M_{4}$$

$$C_{1}$$

$$M_{2}$$

$$C_{1}$$

$$M_{3}$$

$$C_{1}$$

$$M_{4}$$

$$C_{1}$$

$$M_{5}$$

$$C_{1}$$

$$M_{5}$$

$$C_{1}$$

$$M_{6}$$

L3 ANSWER 6 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:439604 CAPLUS Full-text

DOCUMENT NUMBER: 146:421851

TITLE: Preparation of piperidine derivatives as antagonists

of CCR1 receptor

INVENTOR(S): Zhang, Penglie; Pennell, Andrew M. K.; Chen, Wei;

Greenman, Kevin Lloyd; Li, Lianfa; Sullivan, Edward J.

PATENT ASSIGNEE(S): Chemocentryx, Inc., USA SOURCE: PCT Int. Appl., 86pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE		1	APPL	ICAT	ION 1	. O <i>V</i>		D.	ATE	
WO	2007	0448	04		A2	_	2007	0419	1	WO 2	006-	 US39	 713		2	 0061	011
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,
		KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,
		MW,	MX,	MY,	MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,
	RU, SC, S					SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,
	UA, UG, U					VC,	VN,	ZA,	ZM,	ZW							
	RW: AT, BE, B					CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ТJ,	TM										
US	2007	0088	036		A1		2007	0419	1	US 2	006-	5469.	38		2	0061	011
US	2007	0093	467		A1		2007	0426	1	US 2	006-	5802	02		2	0061	011
PRIORIT	Y APP	LN.	INFO	.:					1	US 2	005-	7259	80P	]	P 2	0051	011
OTHER S	OURCE	(S):			MAR	PAT	146:	4218.	51								
GI																	

Title compds. I [R1 = cycloalkyl, (un)substituted alkyl, haloalkyl, etc.; any two R1 attached to the same or different carbon atoms may join together to form a 3- to 7-membered ring; m = 0-4; R2-6 independently = H, halo, CN, NO2, etc.; A = H, aryl, heteroaryl, etc.; B = (un)substituted aryl or heteroaryl; L1 = (un)substituted alkylene or heteroalkylene], and their pharmaceutically acceptable salts, are prepared and disclosed as antagonists of CCR1 receptor. Thus, e.g., II was prepared via heterocyclization of 4-chlorobenzyl cyanide with bis(2-chloroethyl)amine followed by acylation with (4-chloro-5-methyl-3-trifluoromethylpyrazol-1- yl)acetic acid. Select compds. were evaluated for their inhibitory activity in CCR1 ligand binding assay or chemotaxis assay, e.g., II demonstrated IC50 value of < 1000 nM.

IT 934347-49-6P

RN

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of piperidine derivs. as antagonists of CCR1 receptor)

RN 934347-49-6 CAPLUS

CN 4-Piperidinecarboximidamide, 1-[2-[4-chloro-5-methyl-3-(trifluoromethyl)-1H-pyrazol-1-yl]acetyl]-4-(4-chlorophenyl)-N-hydroxy- (CA INDEX NAME)

$$F_3C$$

$$C1$$

$$NH CH_2$$

$$C1$$

$$NH CH_2$$

$$C1$$

IT 934347-39-4P 934347-40-7P 934347-50-9P 934347-52-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperidine derivs. as antagonists of CCR1 receptor) 934347-39-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-[4-chloro-5-methyl-3-(trifluoromethyl)-1H-pyrazol-1-yl]acetyl]-4-(4-chlorophenyl)-N-methyl- (CA INDEX NAME)

RN 934347-40-7 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-[4-chloro-5-methyl-3-(trifluoromethyl)-1H-pyrazol-1-yl]acetyl]-4-(4-chlorophenyl)-N,N-diethyl- (CA INDEX NAME)

RN 934347-50-9 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-[4-chloro-5-methyl-3-(trifluoromethyl)-1H-pyrazol-1-yl]acetyl]-4-(4-chlorophenyl)- (CA INDEX NAME)

$$F_3C$$

$$C1$$

$$N$$

$$N$$

$$CH_2$$

$$C1$$

$$N$$

$$C1$$

RN 934347-52-1 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-(4-chlorophenyl)-1-piperidinyl]-2-[4-chloro-5-methyl-3-(trifluoromethyl)-1H-pyrazol-1-yl]- (CA INDEX NAME)

$$F_3C$$

$$CH_2$$

$$N$$

$$CH_2$$

$$N$$

$$CH_2$$

$$CH_2$$

$$N$$

$$CH_2$$

$$CH$$

L3 ANSWER 7 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:359039 CAPLUS Full-text

DOCUMENT NUMBER: 146:379835

TITLE: Preparation of cyanopyridones as survivin inhibitors INVENTOR(S): Wendt, Michael D.; Sun, Chaohong; Sauer, Daryl R.;

Elmore, Steven W.; Kunzer, Aaron R.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 35pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070072833	A1	20070329	US 2006-529845	20060929
PRIORITY APPLN. INFO.:			US 2005-721634P P	20050929
OTHER SOURCE(S):	MARPAT	146:379835		
GI				

AB Title compds. [I; A1, B1 = R1, OR1, SOR1, SO2R1, COR1, CO2R1, NHCOR1, SO2NHR1, NHSO2NHR1, etc.; R1 = (fused) Ph, heteroaryl, cycloalkyl, cycloalkenyl, heterocycloalkyl, (substituted) alkyl, alkenyl, alkynyl], were prepared Thus, 5-bromo-2-hydroxyacetophenone, 4-methylbenzaldehyde, Et cyanoacetate, and ammonium acetate were refluxed together in EtOH for 6 h to give 6-(5-bromo-2-hydroxyphenyl)-4-(4-methylphenyl)-2-oxo-1,2-dihydro-3- pyridinecarbonitrile. I bound to survivin with binding affinities of 0.037-29 μM.

IT 931113-03-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of cyanopyridones as survivin inhibitors)

RN 931113-03-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[[5-chloro-3-[4-[2-chloro-5-(trifluoromethyl)phenyl]-5-cyano-1,6-dihydro-6-oxo-2-pyridinyl]-2-hydroxyphenyl]methylamino]carbonyl]-4-phenyl-, 1,1-dimethylethylester (CA INDEX NAME)

$$\mathsf{t}\text{-BuO} = \bigcup_{\mathsf{Ph}}^{\mathsf{O}} \bigcup_{\mathsf{N} - \mathsf{CH}\, 2}^{\mathsf{N} - \mathsf{CH}\, 2} \bigcup_{\mathsf{H}\, \mathsf{N} - \mathsf{CN}}^{\mathsf{CH}\, 2} \bigcup_{\mathsf{C}\, \mathsf{N}}^{\mathsf{C}\, \mathsf{F}\, 3}$$

L3 ANSWER 8 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:58314 CAPLUS Full-text

DOCUMENT NUMBER: 146:163038

TITLE: Indole-3-carbonyl-spiro-piperidine derivatives as Vla

receptor antagonists and their preparation,

pharmaceutical compositions and use in the treatment

of diseases

INVENTOR(S): Bissantz, Caterina; Grundschober, Christophe; Ratni,

Hasane; Rogers-Evans, Mark; Schnider, Patrick

PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.

SOURCE: PCT Int. Appl., 292pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P	ITA	ENT I	7O.			KINI		DATE			APPL	ICAT	ION :	NO.		D	ATE	
W(	 D 2	2007	0066	88				2007	0118		 WO 2	006-	 EP63	846		2	0060	704
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	KP,
			KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,
			MW,	MX,	MZ,	NA,	NG,	NI,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,	RU,
			SC,	SD,	SE,	SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,
			US,	UZ,	VC,	VN,	ZA,	ZM,	ZW									
		RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
			IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
			CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,
			GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
			KG,	KΖ,	MD,	RU,	ТJ,	TM										
Α	J 2	20062	2687	24		A1		2007	0118		AU 2	006-	2687	24		2	0060	704
CZ	A 2	2615	726			A1		2007	0118		CA 2	006-	2615	726		2	0060	704
EI	? :	1904	477			A1		2008	0402		EP 2	006-	7640	48		2	0060	704
		R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
			IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR	
US	5 2	20070	0027	173		A1		2007	0201		US 2	006-	4834	62		2	0060	710
US	S '	7332	501			В2		2008	0219									
M	X 2	20080	0058	5		Α		2008	0314		MX 2	008-	585			2	0080	111
US	5 2	20080	0146	557		A1		2008	0619		US 2	008-	1882	3		2	0080	124
KI	R 2	20080	0242	31		Α		2008	0317		KR 2	-800	7026	92		2	0080	131
RIORI	RITY APPLN. INFO.:										EP 2	005-	1064	43	1	A 2	0050	714
											EP 2	005-	1093	64		A 2	0051	007
											WO 2	006-	EP63	846	1	W 2	0060	704
										TTC O	0.0c	1021	60		73 3	0060	710	

OTHER SOURCE(S): MARPAT 146:163038

AΒ This invention relates to indol-3-yl-carbonyl-spiro-piperidine derivs. of formula I, which act as Vla receptor antagonists. The invention further relates to pharmaceutical compns. containing such compds., their use in medicaments against dysmenorrhea, hypertension, chronic heart failure, inappropriate secretion of vasopressin, liver cirrhosis, nephrotic syndrome, obsessive compulsive disorder, anxious and depressive disorders, and methods of preparation thereof. Compds. of formula I wherein A is (un)substituted spiro-indene-piperidine, (un) substituted spiro-indane-piperidine, (un) substituted spiro-indoline-piperidine, (un) substituted spiro-benzofuranpiperidine, etc.; R1 is H, (un)substituted C1-6 alkyl, (un)substituted aryl, (un) substituted 5- to 6-membered (hetero) aryl, and (un) substituted sulfonylaryl, etc.; R2 is H, halo, CN, NO2, (un)substituted C1-6 alkyl, etc.; R3 is H, halo, acyl, (un) substituted C1-6 alkyl, (un) substituted aryl, etc.; and their pharmaceutically acceptable salts thereof are claimed. Example compound II was prepared by benzylation of 2-methyl-1H-indole-carboxylic acid with 1-benzyl bromide; the resulting 1-benzyl-2-methyl-1H-indole-carboxylic acid underwent amidation with spiro[indene-1,4'-piperidine] to give compound II. All the invention compds. were evaluated for their V1a receptor antagonistic activity. From the assay, it was determined that compound II exhibited an Ki value of 6.8 nM.

IT 920023-53-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of indolecarbonyl-spiro-piperidine derivs. as V1a receptor antagonists useful in the treatment of various diseases)

RN 920023-53-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(azidocarbonyl)-4-(2-bromophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

L3 ANSWER 9 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:11886 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 146:121827

TITLE: Piperidine derivatives useful as histamine H3

antagonists and their preparation, pharmaceutical compositions and use in the treatment of diseases

INVENTOR(S): Aslanian, Robert G.; Berlin, Michael Y.; Boyce,

Christopher W.; Chao, Jianhua; De Lera Ruiz, Manuel; Mangiaracina, Pietro; McCormick, Kevin D.; Mutahi, Mwangi W.; Rosenblum, Stuart B.; Shih, Neng-Yang; Solomon, Daniel M.; Tom, Wing C.; Vaccaro, Henry A.;

Zheng, Junying; Zhu, Xiaohong

PATENT ASSIGNEE(S): Schering Corporation, USA SOURCE: PCT Int. Appl., 119pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT	NO.			KIN		DATE		-	APP	LICAT	CION	NO.		D.	ATE	
WO	2007	0019	75		A1		2007	0104	,	WO	2006-	-US23	800		2	0060	619
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB	, BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DΖ	, EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	, JP,	KE,	KG,	KM,	KN,	KP,	KR,
		KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV	, LY,	MA,	MD,	MG,	MK,	MN,	MW,
		MX,	MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG	, PH,	PL,	PT,	RO,	RS,	RU,	SC,
		SD,	SE,	SG,	SK,	SL,	SM,	SY,	ТJ,	TM	, TN,	TR,	TT,	TZ,	UA,	UG,	US,
		UZ,	VC,	VN,	ZA,	ZM,	ZW										
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	, ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PΤ	, RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML	, MR,	NE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ТJ,	TM										
AU	2006	2624	41		A1		2007	0104		AU	2006-	-2624	41		2	0060	619
CA	2610	959			A1		2007	0104	1	CA	2006-	-2610	959		2	0060	619
US	2007	0015	807		A1		2007	0118		US	2006-	-4556	25		2	0060	619
EP	1902	046			A1		2008	0326		EΡ	2006-	-7735	28		2	0060	619
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	, ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙΤ,	LI,	LT,	LU,	LV,	MC,	NL,	PL	, PT,	RO,	SE,	SI,	SK,	TR,	AL,
		BA,	HR,	MK,	YU												
MX	2008	0011	5		Α		2008	0318	]	MX	2008-	-115			2	0071	219
KR	2008	0210	82		Α		2008	0306		KR	2007-	-7308	55		2	0071	228
ORIT:	APP:	LN.	INFO	.:						US	2005-	-6921	10P		P 2	0050	620
									,	WO	2006-	-US23	800	1	W 2	0060	619
D C	ALID CE	/C) .			MADI	ידיתם	1/6.	1210	27								

OTHER SOURCE(S): MARPAT 146:121827

GΙ

$$\begin{array}{c|c}
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AΒ Disclosed are novel compds. of the formula I or a pharmaceutically acceptable salt thereof; compns. and methods of treating allergy-induced airway responses, congestions, obesity, metabolic syndrome, alc. fatty liver disease, hepatic steatosis, nonalcoholic steatohepatitis, cirrhosis, hepatacellular carcinoma and cognitive deficit disorders, using said compds., alone or in combination with other agents. Compds. of formula I wherein M1 and M3 are independently CH and N; M2 is CH, CF and N; Y is CO, CS, C1-5 alkyl, C-NOH and derivs., and SO1-2; X is NH and derivs., aminoalkyl, alkylamino, , C0-3 alkyl, etc.; Z is bond, (un)substituted C1-6 alkyl, (un)substituted alkoxy, (un) substituted alkylamino, etc.; R1 is H, (un) substituted alkyl, (un) substituted (hetero) cycloalkyl, (un) substituted (hetero) aryl, etc.; R2 is (un) substituted alkyl, (un) substituted alkenyl, (un) substituted (hetero) aryl, and (un)substituted (hetero)cycloalkyl; R3 is H, alkyl, (un)substituted (hetero)aryl, (un)substituted (hetero)cycloalkyl, and CONH2; R5 and R6 are independently halo, alkyl, OH, alkoxy, haloalkyl, CN, etc.; a and b are independently 0, 1 and 2; n and p are independently 1, 2 and 3; and their pharmaceutically acceptable salts thereof, are claimed. Example compound II was prepared by etherification ot N-Boc-piperidin-4-ol with 3,5dichlorophenol; the resulting N-Boc-4-(3,5-dichlorophenoxy) underwent hydrolysis to give 4-(3,5-dichlorophenoxy)piperidine, which underwent amidation with N-[2-(tert-butoxycarbonylamino)pyridin-4-ylmethyl]piperidine-4carboxylic acid lithium salt; the resulting amide underwent hydrolysis to give compound II. All the invention compds. were evaluated for their histamine antagonistic activity (data given).

IT 918532-07-7P 918532-53-3P 918533-86-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of piperidine derivs. as histamine  ${\tt H3}$  antagonists useful in treatment of diseases)

RN 918532-07-7 CAPLUS

CN Acetamide, N-[[1-[[5-[(dimethylamino)methyl]-2-furanyl]methyl]-4-piperidinyl]carbonyl]-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME)

CN Acetamide, N-[[4-phenyl-1-[[1-(4-pyridinylmethyl)-4-piperidinyl]carbonyl]-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 918533-86-5 CAPLUS

CN Acetamide, N-[[4-phenyl-1-[[1-(4-pyridazinylmethyl)-4-piperidinyl]carbonyl]-4-piperidinyl]methyl]- (CA INDEX NAME)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:1356631 CAPLUS Full-text

DOCUMENT NUMBER: 146:100679

TITLE: Preparation of pyrazole derivatives as inhibitors of

protein kinases

INVENTOR(S): Cancer, Research Technology Limited; Sore, Hannah

Fiona; Boyle, Robert George; Hamlett, Christopher; Saxty, Gordon; Verdonk, Marinus Leendert; Walker, David Winter; Woodhead, Steven John; Howard, Steven

PATENT ASSIGNEE(S): Astex Therapeutics Limited, UK; The Institute of

Cancer ResearchRoyal Cancer Hospital; Astrazeneca AB

SOURCE: PCT Int. Appl., 202pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION APPLIC	ON NO.	DATE
WO 2006136829	A2 20061	1228 WO 2006-G	B2286	20060621
WO 2006136829	A3 20070	0215		
W: AE, AG, AL,	AM, AT, AU,	AZ, BA, BB, BG, 1	BR, BW, BY, B	Z, CA, CH,
CN, CO, CR,	CU, CZ, DE,	DK, DM, DZ, EC, 1	EE, EG, ES, F	I, GB, GD,
GE, GH, GM,	HN, HR, HU,	ID, IL, IN, IS,	JP, KE, KG, K	M, KN, KP,
KR, KZ, LA,	LC, LK, LR,	LS, LT, LU, LV,	LY, MA, MD, M	G, MK, MN,
MW, MX, MZ,	NA, NG, NI,	NO, NZ, OM, PG, 1	PH, PL, PT, R	O, RS, RU,
SC, SD, SE,	SG, SK, SL,	SM, SY, TJ, TM,	IN, TR, TT, T	Z, UA, UG,

US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM EP 1919875 Α2 20080514 EP 2006-755590 20060621 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR PRIORITY APPLN. INFO.: GB 2005-12654 A 20050621 US 2005-692620P Ρ 20050621 US 2006-743658P Р 20060322 WO 2006-GB2286 W 20060621 OTHER SOURCE(S): MARPAT 146:100679

RN

AB The title pyrazole derivs. I [wherein A = an (un) substituted saturated hydrocarbon linker; E = a monocyclic or bicyclic (hetero)ring; L1 = a bond, alkenylene, alkynylene, S, SO2, etc.; L2 = absent, a bond, alkylene, alkenylene, etc.; L3 = a bond, -C(=0)-NH-, or -NH-C(=0)-; R2 and R3 = independently H, hydrocarbyl, acyl, etc.; R4 = H, halo, CN, CF3, etc.; R5 = H, halo, CN, NH2, etc.; R16 = (un)substituted monocyclic or bicyclic (hetero)ring; R17 = absent, alkyl, or (un)substituted (hetero)ring; with provisos], or salts, solvates, tautomers, or N-oxides thereof were prepared as inhibitors of protein kinase A (PKA) and protein kinase B (PKB). For example, II•formate was prepared in a multi-step synthesis. II•formate showed inhibitory activity with IC50 < 1  $\mu$ M against PKA and PKB. The title compds. are useful in the prophylaxis or treatment of diseases arising from abnormal cell growth, such as proliferation, apoptosis, differentiation, or cancer. Capsules and injectable formulations were described.

917925-61-2P 917925-64-5P 917925-65-6P ΤT

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of pyrazole derivs. as inhibitors of PKA and PKB) 917925-61-2 CAPLUS

1-Piperidinecarboxylic acid, 4-(aminocarbonyl)-4-(4-bromophenyl)-, CN 1,1-dimethylethyl ester (CA INDEX NAME)

RN 917925-64-5 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-bromophenyl)-4-[[(2-hydroxy-2-phenylethyl)amino]carbonyl]-, 9H-fluoren-9-ylmethyl ester (CA INDEX NAME)

RN 917925-65-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-bromophenyl)-4-[[(2-oxo-2-phenylethyl)amino]carbonyl]-, 9H-fluoren-9-ylmethyl ester (CA INDEX NAME)

L3 ANSWER 11 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:1206440 CAPLUS Full-text

DOCUMENT NUMBER: 145:489247

TITLE: Preparation of 4-amino-N'-hydroxy-1,2,5-oxadiazole-3-

carboximidamides and related compounds as modulators

of indoleamine 2,3-dioxygenase for inhibiting immunosuppression and treating various disorders

INVENTOR(S): Combs, Andrew P.; Yue, Eddy W.

PATENT ASSIGNEE(S): Incyte Corporation, USA SOURCE: PCT Int. Appl., 154pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	FENT	NO.			KIN	D	DATE			APP	LICAT	ION :	NO.		D	ATE	
WO	2006	 1221	50		A1	_	2006	1116		uo Wo	2006-	 US17	 983		2	0060	509
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	ВВ	, BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DΖ	, EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	, JP,	KE,	KG,	KM,	KN,	KP,	KR,
		KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY	, MA,	MD,	MG,	MK,	MN,	MW,	MX,
		MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH	, PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
		VN,	YU,	ZA,	ZM,	ZW											
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	, ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PΤ	, RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML	, MR,	NE,	SN,	TD,	TG,	BW,	GH,
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ТJ,	TM										
AU	2006	2440	68		A1		2006	1116		AU	2006-	2440	68		2	0060	509
CA	2606	783			A1		2006	1116		CA	2006-	2606	783		2	0060	509
US	2006	0258	719		A1		2006	1116		US	2006-	4304	41		2	0060	509
EP	1879	573			A1		2008	0123		ΕP	2006-	7594	38		2	0060	509
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	ΕE	, ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL	, PT,	RO,	SE,	SI,	SK,	TR,	AL,
		BA,	HR,	MK,	YU												
IN	2007	KN04	130		Α		2008	0328		IN	2007-	KN41	30		2	0071	026
MX	2007		Α		2008	0205		MX	2007-	1397	7		2	0071	108		
ИО	2007		Α		2008	0207		ИО	2007-	5693			2	0071	108		
KR	2008		Α		2008	0115		KR	2007-	7262	04		2	0071	109		
CN	1012	7		Α		2008	0702		CN	2006-	8002	4326		2	0800	103	
CORIT	Y APP	LN.	INFO	.:						US	2005-	6795	07P		P 2	0050	510
										WO	2006-	US17	983	1	W 2	0060	509
HER SO	ER SOURCE(S):					PAT	145:	4892	47								

OTHER SOURCE(S): MARPAT 145:489247

GΙ

AΒ The present invention is directed to modulators of indoleamine 2,3-dioxygenase (no data) as well as compns. and pharmaceutical methods thereof. In addition to a very broad claim, I is claimed (e.g. 4-Amino-N-(3-fluorophenyl)-N'hydroxy-1,2,5-oxadiazole-3-carboximidamide (1)), in which X1 is (CRaRb)t, or (CRaRb) uC(O)(CRaRb)v; R3a is C1-8 alkyl, C2-8 alkenyl, C2-8 alkynyl, aryl, cycloalkyl, heteroaryl, or heterocycloalkyl, each (un)substituted; R3b is H, C1-8 alkyl, C2-8 alkenyl, C2-8 alkynyl, aryl, cycloalkyl, heteroaryl, or heterocycloalkyl, each (un)substituted; R5b is H, C1-8 alkyl, C2-8 alkenyl, C2-8 alkynyl, aryl, cycloalkyl, heteroaryl, or heterocycloalkyl, each (un) substituted; Ra and Rb = H, halo, C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, C1-4 haloalkyl, aryl, cycloalkyl, heteroaryl, et al.; a = 0-1; m = 0-1; t = 1-6; u = 0-6; and v = 0-6; addnl. details including provisos are given in the claims. Although the methods of preparation are not claimed, prepns. and/or characterization data for 290 examples of I are included. For example, 1 was prepared in 2 steps (21 and 29 % yields, resp.) by 1st converting 4-amino-N'hydroxy-1,2,5-oxadiazole-3-carboximidamide to 4-amino-N-hydroxy-1,2,5oxadiazole-3-carboximidoyl chloride, followed by substitution with 3fluoroaniline.

IT 914474-42-3P, 1-Acetyl-N-[4-[[(3-bromo-4fluorophenyl)amino](hydroxyimino)methyl]-1,2,5-oxadiazol-3-yl]-4phenylpiperidine-4-carboxamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(drug candidate; preparation of 4-amino-N'-hydroxy-1,2,5-oxadiazole-3-carboximidamides and related compds. as modulators of indoleamine 2,3-dioxygenase for inhibiting immunosuppression and treating various disorders)

RN 914474-42-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-acetyl-N-[4-[[(3-bromo-4-fluorophenyl)imino](hydroxyamino)methyl]-1,2,5-oxadiazol-3-yl]-4-phenyl-(CA INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 12 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:978901 CAPLUS Full-text

DOCUMENT NUMBER: 145:348596

TITLE: Combination of a steroid sulfatase inhibitor and an ascomycin for the treatment of inflammatory disorders

INVENTOR(S):
Meingassner, Josef, Gottfried

PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma GmbH

SOURCE: PCT Int. Appl., 104pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	FENT				KINI		DATE						NO.			ATE	
WO	2006	0972	93		A2		2006	0921								0060	315
WO	2006																
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		${ m MZ}$ ,	NA,	NG,	NΙ,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	SK,	SL,	SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
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		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
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		GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
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AU	2006	2247	97												2	0060	315
	2600						2006								_	0060	
EP	1861						2007										
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	1011																
	2007															0070	
	2007				А		2007	1122								0070	
DRIT	Y APP	LN.	INFO	.:										_	_	0050	
								_		WO 2	006-:	EP23	83	1	W 2	0060	315

AB A combination of a steroid sulfatase inhibitor and an ascomycin is prepd for the treatment of inflammatory disorders. Thus, 6.1 mL of a 50% propanephosphoric acid anhydride solution in DMF, 633 mg of N,N-dimethylaminopyridine in 50 mL of dimethylamine and 1.8 mL of diisopropylethylamine were added to a solution of 1.5 g of 8-aza-bicyclo[4.3.1]decane-8,10-dicarboxylic acid 8-tert-Bu ester, and 2.3 g of 3,5-bis(trifluoromethyl)phenylsulfonamide, the mixture obtained was stirred at 40° and diluted with EtAc. The mixture was distilled and the residue obtained was purified to obtain 10-(3,5-Bis- trifluoromethylbenzenesulfonylamino-carbonyl)-8-aza-bicyclo[4.3.1]decane-8- carboxylic acid tert-Bu ester in the form of a sodium salt which was treated with HCl to obtain the ester form (I). Efficacy of a combination of I and ascomycin in the treatment of skin inflammation in mice is shown.

IT 512819-37-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(combination of steroid sulfatase inhibitor and ascomycin for treatment of inflammatory disorders)

RN 512819-37-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[[3,5-bis(trifluoromethyl)phenyl]sulfonyl]amino]carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

L3 ANSWER 13 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:976823 CAPLUS Full-text

DOCUMENT NUMBER: 145:356656

TITLE: Preparation of (hetero)arylsulfonamides as steroid

sulfatase inhibitors for treatment of inflammatory

diseases

INVENTOR(S):
Meingassner, Josef Gottfried

PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma GmbH

SOURCE: PCT Int. Appl., 104pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT :	NO.			KIN:		DATE		,	APPL	ICAT	ION 1	NO.		D	ATE	
WC	2006	 0972	92				2006	0921		WO 2	006-	EP23	82		2	 0060	315
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AΖ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KΡ,	KR,
		KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
		MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	SK,	SL,	SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
		VN,	YU,	ZA,	ZM,	ZW											
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	ΝL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,	GH,
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		KG,	KΖ,	MD,	RU,	ТJ,	TM										
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EP	1861						2007									0060	
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	2007						2007									0070	
	1011		-				2008									0070	
	2007						2007			MX 2						0070	
	2007				А		2007	1128		KR 2					_	0070	
IORIT	Y APP	LN.	INFO	.:						GB 2 WO 2						0050 0060	

AB Title compds. represented by the formula I [wherein R1 = haloalkyl, (un)substituted alkenyl, Ph, thienyl, etc.; R16 = H, R17R18 = (un)substituted piperidinyl, cycloalkyl, bridged cycloalkyl, etc.] were prepared as steroid sulfatase inhibitors. For example, II was provided in a multi-step synthesis starting from 4-bromo-2,5-dichlorothiophene-3- sulfonyl chloride. I showed activity in human steroid sulfatase assay (IC50 = 0.0046 ~ 10), in CHO/STS assay (IC50 = 0.05 ~ 10) and in human skin homogenate (IC50 = 0.03 ~ 10  $\mu$ M). The use of a steroid sulfatase inhibitor in the preparation of a medicament for the treatment of inflammatory diseases.

IT 512819-37-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (hetero)arylsulfonamide derivs. as steroid sulfatase inhibitors for treatment of inflammatory diseases)

RN 512819-37-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[[3,5-bis(trifluoromethyl)phenyl]sulfonyl]amino]carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$F_{3}C \longrightarrow \bigcup_{E_{3}} NH - \bigcup_{Ph} C \longrightarrow OBu-t$$

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 14 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:655838 CAPLUS Full-text

DOCUMENT NUMBER: 145:124560

TITLE: Preparation of pyrazolones as metabotropic glutamate

receptor agonists for the treatment of neurological

and psychiatric disorders

INVENTOR(S): Balestra, Michael; Bunting, Heather; Chen, Deborah;

Egle, Ian; Forst, Janet; Frey, Jennifer; Isaac, Methvin; Ma, Fupeng; Nugiel, David; Slassi,

Abdelmalik; Steelman, Gary; Sun, Guang-Ri; Sundar, Babu; Ukkiramapandian, Radhakrishnan; Urbanek, Rebecca

A.; Walsh, Sally

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; NPS Pharmaceuticals, Inc.

SOURCE: PCT Int. Appl., 332 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	ATEN	I TI	. O <i>l</i>			KIN:		DATE				LICAT					ATE	
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	M	T:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	ΚM,	KN,	ΚP,	KR,
			KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
			MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
			SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
			VN,	YU,	ZA,	ZM,	ZW											
	F	: WS	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
			IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
			CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,	GH,
			GM,	KΕ,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
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						A1						2005-					0051	
EI	2 18					A1						2005-					0051	
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						А						2007-						
												2007-					0070	
												2007-					0070	
			2843!			A		2008	0220			2005-					0070	
RIORI	IY A	APP1	LN.	INFO	.:							2004-					0041	
											WO 2	2005-	US46	606		w 2	0051	222

OTHER SOURCE(S): MARPAT 145:124560

GΙ

AB The title compds. I [X = F, Cl, Br, I, CN, etc.; Q = C, O, S, and N; ring containing Q = 5-7 membered ring which is optionally fused with one or more 5-

7 membered rings; R1 = alkyl, aryl, heteroaryl, etc.; R2 = H, alkyl, alkenyl, and alkynyl; R3, R4 = H, alkyl, aryl, etc.; R5, R6 = H, OH, F, C1, Br, I, etc.; n = 1-6; with provisos], useful in the treatment or prevention of neurol. and psychiatric disorders associated with glutamate dysfunction, were prepared Thus, reacting 5-(bromomethyl)-4-chloro-1-methyl- 2-phenylpyrazolidin-3-one with 1-(4-chlorophenyl)piperazine.2HCl afforded 91% II. Compds. I are active in assays of mGluR function with EC50 of less than about 10  $\mu$ M. Pharmaceutical compns. containing the compds. I are disclosed. 619280-93-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of pyrazolones as metabotropic glutamate receptor agonists for the treatment of neurol. and psychiatric disorders)

RN 619280-93-2 CAPLUS

ΤТ

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[(phenylmethyl)amino]carbonyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 15 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:655708 CAPLUS Full-text

DOCUMENT NUMBER: 145:124611

TITLE: Preparation of [1H-pyrazolo[3,4-d]pyrimidin-4-

yl]piperidine or -piperazine compounds as

serine-threonine kinase modulators (p70S6K, Akt-1 and

Akt-2) for the treatment of immunological, inflammatory and proliferative diseases

INVENTOR(S): Rice, Ken; Co, Erick Wang; Kim, Moon Hwan; Bannen,

Lynn Canne; Bussenius, Joerg; Le, Donna; Tsuhako, Amy Lew; Nuss, John; Wang, Yong; Xu, Wei; Klein, Rhett

Ronald

PATENT ASSIGNEE(S): Exelixis, Inc., USA

SOURCE: PCT Int. Appl., 126 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				D	DATE		APPLICATION NO.						DATE			
WO 2006071819			A1 20060706			WO 2005-US46938						20051227				
W: AI	G, AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
Cl	I, CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
GI	G, GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,	KR,	
K	Z, LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	
M2	Z, NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	
SC	s, SK,	SL,	SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	

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VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
     AU 2005322085
                          Α1
                                20060706
                                            AU 2005-322085
                                                                    20051227
     CA 2590961
                          Α1
                                20060706
                                            CA 2005-2590961
                                                                    20051227
     EP 1848719
                          Α1
                                20071031
                                            EP 2005-855490
                                                                    20051227
         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,
             BA, HR, MK, YU
PRIORITY APPLN. INFO.:
                                             US 2004-640200P
                                                                 Ρ
                                                                    20041228
                                             WO 2005-US46938
                                                                 W
                                                                    20051227
                         MARPAT 145:124611
OTHER SOURCE(S):
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The title compds. I [R1 = H, halo, CN, aryl, etc.; R2 = H, NH2, SH, OH or AΒ alkyl; R3-R6 = H, oxo, alkyl, alkoxy, etc.; L = alkylene, alkenylene, C(0), etc.; Q1 = N, CR13 (wherein R13 = H or C(0)NR12(CH2)nNR10R11); Q2 = a bond, CR14, O or N (R14 = H, OH, alkyl, etc.); n = 1-4; W = alkyl, NR10R11, aryl, cycloalkyl, etc.; or V, Q2, L and W together form aryl ring, heteroaryl ring, cycloalkyl ring, etc.; R10, R11, R12 = H or alkyl which is optionally substituted with aryl or heteroaryl; with provisos], useful for inhibition of kinases, more specifically p70S6 kinases, and more preferably p70S6, Akt-1 and Akt-2 kinases, were prepared E.g., a multi-step synthesis of II, starting from N-Boc-4-(4- chlorobenzoyl)piperidine and 2-(diethylamino)ethylamine, was given. Compds. I were tested against p70S6K, Akt-1 and Akt-2 (IC50 values were given for representative compds. I). The invention provides compds. for modulating protein kinase enzymic activity for modulating cellular activities such as proliferation, differentiation, programmed cell death, migration, chemoinvasion and metabolism Compds. I inhibit, regulate and/or modulate kinase receptor signal transduction pathways related to the changes in cellular activities as mentioned above, and the invention includes compns. which contain these compds., and methods of using them to treat kinasedependent diseases and conditions. 849106-03-2 ΤT

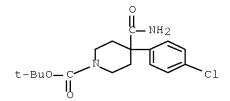
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of [1H-pyrazolo[3,4-d]pyrimidin-4-yl]piperidine or -piperazine compds. as serine-threonine kinase modulators (p70S6K, Akt-1 and Akt-2) for the treatment of immunol., inflammatory and proliferative diseases)

RN 849106-03-2 CAPLUS

CN

1-Piperidinecarboxylic acid, 4-(aminocarbonyl)-4-(4-chlorophenyl)-,



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 16 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:635057 CAPLUS Full-text

DOCUMENT NUMBER: 145:61443

TITLE: Solid phase affinity ligands for antibody purification INVENTOR(S): Johannsen, Ib; Gallego, Monica Ramos; Michael, Roice;

Nothelfer, Franz; Ambrosius, Dorothee; Jacobi,

Alexander

PATENT ASSIGNEE(S): Versamatrix A/S, Den. SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAI	PATENT NO.						KIND DATE				APPLICATION NO.						DATE			
	WO 2006066598 WO 2006066598								WO 2005-DK828						20051223					
	W:	AE, CN, GE, KZ, MZ, SG, VN, AT, IS, CF,	AG, CO, GH, LC, NA, SK, YU, BE, IT, CG,	AL, CR, GM, LK, NG, SL, ZA, BG, LT,	AM, CU, HR, LR, NI, SM, ZM, CH, LU, CM,	AT, CZ, HU, LS, NO, SY, ZW CY, LV, GA,	AU, DE, ID, LT, NZ, TJ, CZ, MC, GN,	AZ, DK, IL, LU, OM, TM, DE, NL, GQ,	DM, IN, LV, PG, TN, DK, PL, GW,	DZ, IS, LY, PH, TR, EE, PT, ML,	, BG, , EC, , JP, , MA, , PL, , TT, , ES, , RO, , MR,	EE, KE, MD, PT, TZ, FI, SE, NE,	EG, KG, MG, RO, UA, FR, SI, SN,	ES, KM, MK, RU, UG, GB, SK, TD,	FI, KN, MN, SC, US, GR, TR,	GB, KP, MW, SD, UZ, HU, BF, BW,	GD, KR, MX, SE, VC, IE, BJ, GH,			
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AU	AU 2005318700						0629	-	AU 2005-318700						20051223					
CA	CA 2591785				A1		2006	0629	1	CA 2005-2591785						20051223				
EP	EP 1831243				A2		2007	0912	EP 2005-822928						20051223					
MX	MX 200707703					20070814			]	MX 2007-7703						20070622				
IN	IN 2007KN02558					20070824				IN 2007-KN2558					20070709					
KR	KR 2007115871					20071206				KR 2007-716990						20070723				
CN 101124238					Α	20080213			1	CN 2005-80048400					20070815					
PRIORITY						US 2	2004-2 2005-0 2005-1	6433	14P		P 2	0041 0050 0051	113							

AB The authors disclose solid support materials having covalently immobilized affinity ligands comprising one or more hydrophobic functional group(s), one or more cationic functional group(s), or one or more heteroarom. functional group(s) wherein the hydrophobic functional group is separated from the cationic/heteroarom. functional group by a through bond distance of from 5Å to 20Å and the ligand has a mol. weight of from 120 Da to 5000 Da. Typically, the affinity resin has a binding capacity larger than 5 mg monoclonal antibody per mL of affinity resin. In one example, the affinity matrix comprises the trimethoxyphenylpropionate—tryptophan—arginine—glycine ligand conjugated to amino—activated Toyopearl resin.

IT 891504-76-0 891505-04-7

RL: BUU (Biological use, unclassified); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses) (solid phase immobilized; for affinity chromatog. of antibodies)

RN 891504-76-0 CAPLUS

CN Glycine, N-[(4-phenyl-4-piperidinyl)carbonyl]-D-leucyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$HO_2C$$
 $N$ 
 $i-Eu$ 
 $Ph$ 
 $NH$ 

RN 891505-04-7 CAPLUS

CN Glycine, N2-[[1-[[3,5-bis(1,1-dimethylpropyl)phenoxy]acetyl]-4-phenyl-4-piperidinyl]carbonyl]-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L3 ANSWER 17 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:625275 CAPLUS Full-text

DOCUMENT NUMBER: 145:249070

TITLE: Preparation of 2,3-dihydro-1H-spiro[isoquinoline-4,4'-

piperidine] via an N-sulfonyl Pictet-Spengler reaction

AUTHOR(S): Liu, Jian; Jian, Tianying; Sebhat, Iyassu; Nargund,

Ravi

CORPORATE SOURCE: Department of Medicinal Chemistry, Merck Research

Laboratories, Rahway, NJ, 07065, USA

SOURCE: Tetrahedron Letters (2006), 47(29), 5115-5117

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 145:249070

AB A high yielding synthesis of variously substituted 2,3-dihydro-1H-spiro[isoquinoline-4,4'-piperidine] is reported. N-(2- nitrophenyl)sulfonyl was successfully used as both an activating and protecting group for the key Pictet-Spengler reaction.

IT 199104-96-6P 906369-58-2P 906369-59-3P 906369-60-6P 906369-61-7P 906369-62-8P 906369-63-9P 906369-64-0P 906369-80-0P 906369-81-1P 906369-82-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of dihydro-spiro[isoquinoline-piperidine] by Pictet-Spengler reaction using N-(nitrophenyl)sulfonyl activating and protecting group)

RN 199104-96-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(methylsulfonyl)amino]methyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 906369-58-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-methylphenyl)-4[[(methylsulfonyl)amino]methyl]-, ethyl ester (CA INDEX NAME)

RN 906369-59-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-fluorophenyl)-4[[(methylsulfonyl)amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 906369-60-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-chlorophenyl)-4[[(methylsulfonyl)amino]methyl]-, phenylmethyl ester (CA INDEX NAME)

RN 906369-61-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-methoxyphenyl)-4[[(methylsulfonyl)amino]methyl]-, ethyl ester (CA INDEX NAME)

RN 906369-62-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(3,4-difluorophenyl)-4[[(methylsulfonyl)amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 906369-63-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(3,4-dimethylphenyl)-4[[(methylsulfonyl)amino]methyl]-, phenylmethyl ester (CA INDEX NAME)

RN 906369-64-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-chloro-3-methylphenyl)-4[[(methylsulfonyl)amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c} O \\ C \\ OBu-t \\ O \\ C1 \\ \end{array}$$

RN 906369-80-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(2-nitrophenyl)sulfonyl]amino]methyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 906369-81-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-methylphenyl)-4-[[[(2-nitrophenyl)sulfonyl]amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 906369-82-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-chloro-3-methylphenyl)-4-[[[(2-nitrophenyl)sulfonyl]amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 18 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:465188 CAPLUS Full-text

DOCUMENT NUMBER: 144:488667

TITLE: Pharmaceutical compounds such as quinazolinones and

their preparation, and use for treatment of protein

kinase A and/or B mediated diseases

INVENTOR(S): Berdini, Valerio; Boyle, Robert George; Saxty, Gordon;

Verdonk, Marinus Leendert; Woodhead, Steven John; Wyatt, Paul Graham; Sore, Hannah Fiona; Walker, David

Winter; Caldwell, John; Collins, Ian

PATENT ASSIGNEE(S): Astex Therapeutics Limited, UK; The Institute of

Cancer ResearchRoyal Cancer Hospital; Cancer Research

Technology Limited

SOURCE: PCT Int. Appl., 178 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
WO 2006051290 WO 2006051290	A2 A3	20060518 20060914	WO 2005-GB4323	20051109		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,

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GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
             MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
     EP 1814552
                                20070808
                                            EP 2005-801609
                                                                   20051109
                          Α2
         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
                                                                   20051109
     JP 2008519087
                                20080605
                                            JP 2007-540710
                          Τ
PRIORITY APPLN. INFO.:
                                            GB 2004-24742
                                                                A 20041109
                                            US 2004-626403P
                                                                P 20041109
                                            WO 2005-GB4323
                                                                W 20051109
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MARPAT 144:488667 OTHER SOURCE(S):

GΙ

The invention is related to quinazolinones I [B-D=N:CH] and derivs., NHCO and AΒ derivs.; G = OH, NH2 ad derivs.; E = CONH and derivs., O, S, NH, etc., with proviso; A = a bond and R4 and R4a are absent; or A = saturated hydrocarbon linker containing 1-7 C's, wherein 1 of the C atoms may optionally be replaced by an O or N atom; R1-R3 = independently H, halo, (un)substituted hydrocarbyl; R4 = H, alkyl; R4a = H, alkyl, monocyclic or bicyclic carbocyclyl or heterocyclyl containing up to 3 heteroatoms; or R4 and R4a together with the intervening atom(s) of A form a saturated monocyclic heterocyclic group] or salts, solvates, tautomers or N-oxides thereof, that inhibit or modulate the activity of protein kinase A (PKA) and protein kinase B (PKB), and their use in the treatment or prophylaxis of disease states or conditions mediated by PKA and PKB, such as proliferative diseases. The invention is also related to the preparation of quinazolinones I. Thus, acylation of 4-[(tertbutoxycarbonyl)amino]-2- (3,4-dichlorophenyl)butyric acid with 7-amino-3Hquinazolin-4-one and Boc-deprotection gave quinazolinone II. Selected I inhibited protein kinase A and/or B with IC50 values of less than 50  $\mu M$ . 669068-16-0P, 4-Aminomethyl-4-(4-chlorophenyl)piperidine-1-ΙT carboxylic acid tert-butyl ester 887128-75-8P, 4-[(4-0xo-3,4-dihydroquinazolin-7-yl)carbamoyl]-4-phenylpiperidine-1carboxylic acid 9H-fluoren-9-ylmethyl ester 887129-06-8P,

4-(4-Chlorophenyl)-4-[(4-oxo-3,4-dihydroquinazolin-7-yl)carbamoyl]piperidine-1-carboxylic acid 9H-fluoren-9-ylmethyl ester 887129-10-4P, 4-(4-Chlorophenyl)-4-[[[3-(2,4-dimethoxybenzyl)-4-oxo-3,4-dihydroquinazolin-7-yl]amino]methyl]piperidine-1-carboxylic acid tert-butyl ester

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of quinazolinones as protein kinase A and/or B inhibitors for treating proliferative diseases)

RN 669068-16-0 CAPLUS

CN

1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-chlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 887128-75-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(3,4-dihydro-4-oxo-7-quinazolinyl)amino]carbonyl]-4-phenyl-, 9H-fluoren-9-ylmethyl ester (CA INDEX NAME)

RN 887129-06-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-chlorophenyl)-4-[[(3,4-dihydro-4-oxo-7-quinazolinyl)amino]carbonyl]-, 9H-fluoren-9-ylmethyl ester (CA INDEX NAME)

RN 887129-10-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-chlorophenyl)-4-[[[3-[(2,4-dimethoxyphenyl)methyl]-3,4-dihydro-4-oxo-7-quinazolinyl]amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{C1} \\ \text{CH}_2 \text{-NH} \\ \text{N} \\ \text{CH}_2 \text{-NH} \\ \text{OMe} \\ \text$$

L3 ANSWER 19 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:411957 CAPLUS Full-text

DOCUMENT NUMBER: 144:450728

TITLE: Ortho-condensed pyridine and pyrimidine derivatives

(e. g. purines) as protein kinases inhibitors and

their preparation, pharmaceutical compositions and use for treatment of protein kinase mediated diseases such

as proliferative diseases

INVENTOR(S): Berdini, Valerio; Boyle, Robert George; Saxty, Gordon;

Walker, David Winter; Woodhead, Steven John; Wyatt, Paul Graham; Caldwell, John; Collins, Ian; Da Fonseca,

Tatiana Faria

PATENT ASSIGNEE(S): Astex Therapeutics Ltd., UK; The Institute of Cancer

ResearchRoyal Cancer Hospital; Cancer Research

Technology Limited

SOURCE: PCT Int. Appl., 223 pp., which

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.				KIND		DATE			APPL	ICAT		DATE				
WO	WO 2006046024			 A1		20060504			WO 2	005-		20051025					
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KM,	KΡ,	KR,	KΖ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,
		NA,	NG,	NΙ,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,
		SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,
		YU,	ZA,	ZM,	ZW												
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		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ТJ,	TM										
EP	EP 1812004			A1		2007	0801		EP 2	005-	7976	20051025					
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		IS,	ΙT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR	
JP	JP 2008517984				Τ		2008	0529		JP 2	007-	5385	00	20051025			
PRIORIT	PRIORITY APPLN. INFO.:									GB 2	004 -	2365	5		A 2	0041	025
										US 2	004 -	6218	21P		P 2	0041	025
										US 2	005-	6841	19P		P 2	0050	524
										WO 2	005-	GB41	19	,	W 2	0051	025
OTHER S	OTHER SOURCE(S):					MARPAT 144:450728											

GΙ

The invention provides a compound for use as a protein kinase B inhibitor, the AΒ compound being a compound of the formula I or salts, solvates, tautomers or Noxides thereof. Compds. of formula I where in T is N or CR5; J1-J2 is N=CR6, R7C=N, R8NCO, (R8)2CO, N=N, or R7C=CR6; E is 5- to 6-membered carbocyclic or heterocyclic group; Q1 is a bond, C1-3 saturated hydrocarbon where one of the carbon atoms may be optionally replaced by O or N, or an adjacent pair of carbons be replaced by CONH and derivs., or NHCO and derivs.; Q2 is a bond, (un) substituted saturated C1-3 hydrocarbon, where one of the carbon atoms my be optionally replaced by N or O; G is H, NH2 and derivs., OH, or SH, with the provision that E is (hetero)aryl and Q2 is a bond, then G is H; R1 is H, or (hetero)aryl; R4, R6, and R8 are independently H, halo, C1-5 saturated hydrocarbyl, CN, CONH2, CONHR9, CF3, NH2, NHCOR9, or NHCONHR9; R5 and R7 are independently H, halo, C1-5 saturated heterocarbyl, CN, or CF3; R9 is (un) substituted Ph, or (un) substituted Bn; or their pharmaceutically acceptable salts, solvates, tautomers, or N-oxides thereof. Example compound II was prepared by amination of 9-(tetrahydropyran-2-yl)-6-chloropurine with 4-(N-Boc)piperidine; the resulting [1-[9-(tetrahydropyran-2-y1)-9H-purin-6yl]piperidin-4- yl]carbamic acid tert-Bu ester underwent methylation with Me

iodide to give methyl-[1-[9-(tetrahydropyran-2-yl)-9H-purin-6-yl]piperidin-4-yl]carbamic acid tert-Bu ester, which underwent hydrolysis to give example compound II. All the invention compds. were tested for their protein kinase inhibitory activity. From the assay it was determined that compound II and some of the other example compds. exhibited IC50 values of less than 10  $\mu\text{M}$  against both protein kinase A and B. The invention compds. were also evaluated for their antiproliferative activity. Many of the invention compds. were found to have IC50 values of less than 25  $\mu\text{M}$  and the preferred compds. have IC50 values of less than 15  $\mu\text{M}$ .

IT 669068-16-0P 885500-47-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

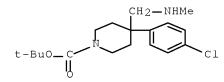
(intermediate; preparation of ortho-condensed pyridine and pyrimidine derivs. (e. g. purines) as protein kinases inhibitors useful for treatment of protein kinase mediated diseases such as proliferative diseases)

RN 669068-16-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-chlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 885500-47-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-chlorophenyl)-4-[(methylamino)methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 20 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:1331017 CAPLUS Full-text

DOCUMENT NUMBER: 144:69739

TITLE: Preparation of substituted piperidines that have

antiangiogenic activity for use against tumors

INVENTOR(S): Haviv, Fortuna; Bradley, Michael F.; Schneider, Andrew

J.

PATENT ASSIGNEE(S): Abbott Laboratories, USA SOURCE: PCT Int. Appl., 78 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

E	PATENT NO.					KIND		DATE		APPLICATION NO.						DATE		
	√O 2005	05121090			A1		20051222		,	WO 2	005-		20050526					
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		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KP,	KR,	KΖ,	
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	
		NG,	ΝI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	
		SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	
		ZA,	ZM,	ZW														
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,	
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	
		MR,	ΝE,	SN,	TD,	TG												
PRIORITY APPLN. INFO.:				US 2004-576101P P 20040602											602			
OTHER SOURCE(S): GI				CASREACT 144:69739; MARPAT 144:69739														

AΒ Substituted piperidines (shown as I; variables defined below; e.g. (3S)-4amino-4-oxo-3-[[(4-phenylpiperidin-4-yl)carbonyl]amino]butanoic acid trifluoroacetate (shown as II)) inhibit angiogenesis and are useful for treating conditions that arise from or are exacerbated by angiogenesis. disclosed are pharmaceutical compns. comprising I, methods of treatment comprising I, and methods of inhibiting angiogenesis comprising I. Although the methods of preparation are not claimed, prepns. and/or characterization data for .apprx.30 examples of I are included. For example, II was prepared by coupling deprotected 4-(2',4'- dimethoxyphenyl-Fmocaminomethyl)phenoxyacetamidonorleucyl-MBHA resin with Fmoc-Asp(OtBu)-OH, followed by coupling of the deprotected product with 1-Fmoc-4phenylpiperidine-4-carboxylic acid, followed by TFA cleavage. For I: L = abond and alkylene; R1 = H, alkyl, alkylcarbonyl, heteroarylalkylcarbonyl, heteroarylcarbonyl, heterocyclealkylcarbonyl, heterocyclecarbonyl, (NZ1Z2) alkylcarbonyl, R3R4NCH(R2)C(O), R6R7CH(R5)C(O)N(R3)CH(R2)C(O); R2 = H, alkyl, arylalkyl, heteroarylalkyl, heterocyclealkyl, (NZ3Z4)alkyl, and (NZ5Z6C(:NH)NZ7) alkyl; R3 = H and alkyl; R4 = H, alkyl, alkylcarbonyl, arylcarbonyl, arylalkylcarbonyl, cycloalkylcarbonyl, cycloalkylalkylcarbonyl, heteroarylalkylcarbonyl, heteroarylcarbonyl, heterocyclealkylcarbonyl, and heterocyclecarbonyl. R5 = H, alkyl, arylalkyl, heteroarylalkyl, heterocyclealkyl, (NZ8Z9)alkyl, and (NZ10Z11C(:NH)NZ12)alkyl; R6 = H, alkyl, and alkylcarbonyl; R7 = H, alkyl, alkylcarbonyl, arylcarbonyl,

arylalkylcarbonyl, cycloalkylcarbonyl, cycloalkylalkylcarbonyl, heteroarylalkylcarbonyl, heteroarylcarbonyl, heterocyclealkylcarbonyl, and heterocyclecarbonyl; R8 = aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heterocycle, heterocyclealkyl, heteroaryl, heteroarylalkyl, hydroxy, NZ13Z14, and N(R9)CH(R10)C(O)R11; R9 = H and alkyl; R10 = carboxyalkyl and (NZ15Z16)carbonylalkyl; R11 = aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heterocycle, heterocyclealkyl, heteroaryl, heteroarylalkyl, hydroxy and NZ17Z18; R12 = H, R12a, and phenyl; addnl. details are given in the claims. Representative I (not specified) inhibited human endothelial cell migration between .apprx.8% and .apprx.97% when tested at a concentration of 10 nM; test results for antitumor effect against lung carcinoma and human fibrosarcoma are also presented.

also presented. ΤТ 871811-05-1P, (3S)-3-[[[1-[(2S)-2-(Acetylamino)-6-aminohexanovl]-4phenylpiperidin-4-yl]carbonyl]amino]-4-amino-4-oxobutanoic acid 871811-06-2P, (3S)-3-[[[1-[(2S)-2-(Acetylamino)-6-aminohexanoy1]-4phenylpiperidin-4-yl]carbonyl]amino]-4-amino-4-oxobutanoic acid 6-aminohexanoyl]-4-phenylpiperidin-4-yl]carbonyl]amino]succinic acid 871811-08-4P, (2S)-2-[[[1-[(2S)-2-(Acetylamino)-6-aminohexanoyl]-4phenylpiperidin-4-yl]carbonyl]amino]succinic acid trifluoroacetate 871811-11-9P, (2S)-2-[[[1-(6-Aminohexanoyl)-4-phenylpiperidin-4yl]carbonyl]amino]succinic acid 871811-12-0P, (2S)-2-[[[1-(6-Aminohexanoyl)-4-phenylpiperidin-4yl]carbonyl]amino]succinic acid trifluoroacetate 871811-13-1P, (3S)-4-Amino-3-[[[1-(5-aminopentanoyl)-4-phenylpiperidin-4vl]carbonvl]amino]-4-oxobutanoic acid 871811-14-2P, (3S)-4-Amino-3-[[[1-(5-aminopentanovl)-4-phenylpiperidin-4yl]carbonyl]amino]-4-oxobutanoic acid trifluoroacetate 871811-15-3P, (3S)-4-Amino-3-[[[1-(4-aminobutanoyl)-4phenylpiperidin-4-yl]carbonyl]amino]-4-oxobutanoic acid 871811-16-4P, (3S)-4-Amino-3-[[[1-(4-aminobutanoyl)-4phenylpiperidin-4-yl]carbonyl]amino]-4-oxobutanoic acid trifluoroacetate 871811-25-5P, 3-[[[1-[(2S)-2-(Acetylamino)-6-aminohexanoyl]-4phenylpiperidin-4-yl]carbonyl]amino]propanoic acid 871811-26-6P, 3-[[[1-[(2S)-2-(Acetylamino)-6-aminohexanoyl]-4-phenylpiperidin-4yl]carbonyl]amino]propanoic acid trifluoroacetate 871811-29-9P, (3S)-4-Amino-3-[[[1-(6-aminohexanoyl)-4-phenylpiperidin-4yl]carbonyl]amino]-4-oxobutanoic acid 871811-30-2P, (3S)-4-Amino-3-[[[1-(6-aminohexanoyl)-4-phenylpiperidin-4yl]carbonyl]amino]-4-oxobutanoic acid trifluoroacetate 871811-31-3P, (4S)-4-[[[1-[(2S)-2-(Acetylamino)-6-aminohexanoy1]-4phenylpiperidin-4-yl]carbonyl]amino]-5-amino-5-oxopentanoic acid 871811-32-4P, (4S)-4-[[[1-[(2S)-2-(Acetylamino)-6-aminohexanoy1]-4phenylpiperidin-4-yl]carbonyl]amino]-5-amino-5-oxopentanoic acid trifluoroacetate 871811-33-5P, (3S)-4-Amino-3-[[[1-(3aminopropanoyl)-4-phenylpiperidin-4-yl]carbonyl]amino]-4-oxobutanoic acid 871811-34-6P, (3S)-4-Amino-3-[[[1-(3-aminopropanoyl)-4phenylpiperidin-4-yl]carbonyl]amino]-4-oxobutanoic acid trifluoroacetate 871811-35-7P, (2S)-2-[[[1-[(2S)-2-(Acetylamino)-6-aminohexanoy1]-4phenylpiperidin-4-yl]carbonyl]amino]-4-amino-4-oxobutanoic acid 871811-36-8P, (2S)-2-[[[1-[(2S)-2-(Acetylamino)-6-aminohexanoy1]-4phenylpiperidin-4-yl]carbonyl]amino]-4-amino-4-oxobutanoic acid 6-(isopropylamino)hexanoyl]-4-phenylpiperidin-4-yl]carbonyl]amino]succinic acid 871811-38-0P, (2S)-2-[[[1-[(2S)-2-(Acetylamino)-6-(isopropylamino)hexanoyl]-4-phenylpiperidin-4-yl]carbonyl]amino]succinic acid trifluoroacetate 871811-40-4P, (2R)-2-[[[1-[(2S)-2-(Acetylamino)-6-aminohexanoyl]-4-phenylpiperidin-4yl]carbonyl]amino]succinic acid 871811-41-5P, (2R)-2-[[[1-[(2S)-2-(Acetylamino)-6-aminohexanoyl]-4-phenylpiperidin-4-

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yl]carbonyl]amino]succinic acid trifluoroacetate 871811-42-6P,
(2S)-2-[[[4-Phenyl-1-[(pyridin-3-yl)carbonyl]piperidin-4-
yl]carbonyl]amino]succinic acid 871811-43-7P,
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(2R)-2-[[[1-[(2R)-2-(Acetylamino)-6-aminohexanoyl]-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiperidin-4-phenylpiper
yl]carbonyl]amino]succinic acid 871811-45-9P,
(2R)-2-[[[1-[(2R)-2-(Acetylamino)-6-aminohexanoyl]-4-phenylpiperidin-4-
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(2S)-2-[[4-Phenyl-1-[(piperidin-4-yl)acetyl]piperidin-4-
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(2S)-2-[[[4-Phenyl-1-[(piperidin-4-yl)acetyl]piperidin-4-
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(2S)-2-[[[4-Phenyl-1-[(piperazin-1-yl)acetyl]piperidin-4-
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(2S)-2-[[[4-Phenyl-1-[(piperazin-1-yl)acetyl]piperidin-4-
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871811-52-8P, (2S)-2-[[[1-((2S)-2,6-Diaminohexanoyl)-4-
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(2S)-2-[[[1-[(2S)-2-((3R)-3-Amino-2-oxopyrrolidin-1-y1)-4-methylpentanoy1]-
4-phenylpiperidin-4-yl]carbonyl]amino]succinic acid 871811-60-8P
(2S)-2-[[1-[(2S)-2-((3R)-3-Amino-2-oxopyrrolidin-1-y1)-4-
methylpentanoyl]-4-phenylpiperidin-4-yl]carbonyl]amino]succinic acid
trifluoroacetate 871811-63-1P, (2S)-2-[[[1-[(2S)-6-Amino-2-[[(6-2S)-6-Amino-2-[(6-2S)-6-Amino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(6-2S)-6-2Mino-2-[(
methylpyridin-3-yl)carbonyl]amino]hexanoyl]-4-phenylpiperidin-4-
yl]carbonyl]amino]succinic acid 871811-64-2P,
(2S)-2-[[[1-[(2S)-6-Amino-2-[[(6-methylpyridin-3-
yl)carbonyl]amino]hexanoyl]-4-phenylpiperidin-4-yl]carbonyl]amino]succinic
acid trifluoroacetate 871811-65-3P, (2S)-2-[[[1-[(2S)-6-Amino-2-(2S)-6-Amino-2-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S)-6-(2S
[(pyridin-3-ylcarbonyl)amino]hexanoyl]-4-phenylpiperidin-4-
yl]carbonyl]amino]succinic acid 871811-66-4P,
(2S)-2-[[[1-[(2S)-6-Amino-2-[(pyridin-3-ylcarbonyl)amino]hexanoyl]-4-
phenylpiperidin-4-yl]carbonyl]amino]succinic acid trifluoroacetate
871811-67-5P, (2S)-2-[[[1-[(2S)-2-(Acetylamino)-5-
[[amino(imino)methyl]amino]pentanoyl]-4-phenylpiperidin-4-
yl]carbonyl]amino]succinic acid 871811-68-6P,
(2S)-2-[[1-(2S)-2-(Acetylamino)-5-[[amino(imino)methyl]amino]pentanoyl]-
4-phenylpiperidin-4-yl]carbonyl]amino]succinic acid trifluoroacetate
871811-69-7P, (2S)-2-[[(1-Acetyl-4-phenylpiperidin-4-
yl)carbonyl]amino]succinic acid 871811-70-0P,
(3S)-4-Amino-3-[[[1-(aminoacetyl)-4-phenylpiperidin-4-yl]carbonyl]amino]-4-
5-aminopentanoy1]-4-phenylpiperidin-4-y1]carbony1]amino]-4-amino-4-
oxobutanoic acid 871811-75-5P, (2S)-2-[[[1-[(2S)-4-Methyl-2-
(methylamino)pentanoyl]-4-phenylpiperidin-4-yl]carbonyl]amino]succinic
acid 871811-76-6P, 4-[[[1-[(2S)-2-(Acetylamino)-6-aminohexanoyl]-
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4-phenylpiperidin-4-yl]carbonyl]amino]butanoic acid 871811-77-7P
, [[[1-[(2S)-2-(Acetylamino)-6-aminohexanoyl]-4-phenylpiperidin-4yl]carbonyl]amino]acetic acid 871811-80-2P,
(2S)-2-[[[1-[2-(Acetylamino)-3-(piperidin-4-yl)propanoyl]-4phenylpiperidin-4-yl]carbonyl]amino]succinic acid 871811-81-3P,
3-[[[1-[2-(Acetylamino)-3-(piperidin-4-yl)propanoyl]-4-phenylpiperidin-4yl]carbonyl]amino]propanoic acid 871811-82-4P,
(2S)-2-[[[1-[(2S)-2-(Acetylamino)-6-[(pyridin-3-ylcarbonyl)amino]hexanoyl]-4-phenylpiperidin-4-yl]carbonyl]amino]succinic acid 871811-83-5P
, (3S)-3-[[[1-[(2S)-2-(Acetylamino)-6-aminohexanoyl]-4-phenylpiperidin-4yl]carbonyl]amino]-4-(ethylamino)-4-oxobutanoic acid
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(drug candidate; preparation of substituted piperidines that have antiangiogenic activity for use against tumors)

RN 871811-05-1 CAPLUS

CN Butanoic acid, 3-[[[1-[(2S)-2-(acetylamino)-6-amino-1-oxohexyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-4-amino-4-oxo-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 871811-06-2 CAPLUS

CN L- $\alpha$ -Asparagine, N2-acetyl-L-lysyl-4-phenyl-4-piperidinecarbonyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 871811-05-1 CMF C24 H35 N5 O6

Absolute stereochemistry.

CM 2

CRN 76-05-1

RN 871811-07-3 CAPLUS
CN L-Aspartic acid. N2-acetyl-L-lysyl-4-phenyl-4-pir

CN L-Aspartic acid, N2-acetyl-L-lysyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 871811-08-4 CAPLUS

CN L-Aspartic acid, N2-acetyl-L-lysyl-4-phenyl-4-piperidinecarbonyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 871811-07-3 CMF C24 H34 N4 O7

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-11-9 CAPLUS
CN L-Aspartic acid, N-[[1-(6-amino-1-oxohexyl)-4-phenyl-4-piperidinyl]carbonyl]- (CA INDEX NAME)

Absolute stereochemistry.

HO2C 
$$\stackrel{\text{H}}{\longrightarrow}$$
  $\stackrel{\text{H}}{\longrightarrow}$   $\stackrel{\text{NH}_2}{\longrightarrow}$   $\stackrel{\text{NH}_2}{\longrightarrow}$ 

RN 871811-12-0 CAPLUS
CN L-Aspartic acid, N-[[1-(6-amino-1-oxohexyl)-4-phenyl-4-piperidinyl]carbonyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 871811-11-9

CMF C22 H31 N3 O6

Absolute stereochemistry.

CM 2 CRN 76-05-1 CMF C2 H F3 O2

RN 871811-13-1 CAPLUS

CN Butanoic acid, 4-amino-3-[[[1-(5-amino-1-oxopentyl)-4-phenyl-4-piperidinyl]carbonyl]amino]-4-oxo-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 871811-14-2 CAPLUS

CN Butanoic acid, 4-amino-3-[[[1-(5-amino-1-oxopentyl)-4-phenyl-4-piperidinyl]carbonyl]amino]-4-oxo-, (3S)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 871811-13-1 CMF C21 H30 N4 O5

Absolute stereochemistry.

$$HO_2C$$
 $HO_2C$ 
 $HO_2C$ 

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-15-3 CAPLUS

CN Butanoic acid, 4-amino-3-[[[1-(4-amino-1-oxobuty1)-4-phenyl-4-

piperidinyl]carbonyl]amino]-4-oxo-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

$$HO_2C$$
 $HO_2C$ 
 $HO_2C$ 
 $HO_2C$ 
 $HO_2C$ 
 $HO_2C$ 
 $HO_2C$ 
 $HO_2C$ 
 $HO_2C$ 
 $HO_2C$ 

RN 871811-16-4 CAPLUS

CN Butanoic acid, 4-amino-3-[[[1-(4-amino-1-oxobutyl)-4-phenyl-4-piperidinyl]carbonyl]amino]-4-oxo-, (3S)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 871811-15-3 CMF C20 H28 N4 O5

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-25-5 CAPLUS 
CN  $\beta$ -Alanine, N2-acetyl-L-lysyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

RN 871811-26-6 CAPLUS

CN  $\beta$ -Alanine, N2-acetyl-L-lysyl-4-phenyl-4-piperidinecarbonyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 871811-25-5 CMF C23 H34 N4 O5

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-29-9 CAPLUS

CN Butanoic acid, 4-amino-3-[[[1-(6-amino-1-oxohexyl)-4-phenyl-4-piperidinyl]carbonyl]amino]-4-oxo-, (3S)- (CA INDEX NAME)

RN 871811-30-2 CAPLUS

CN Butanoic acid, 4-amino-3-[[[1-(6-amino-1-oxohexyl)-4-phenyl-4-piperidinyl]carbonyl]amino]-4-oxo-, (3S)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 871811-29-9 CMF C22 H32 N4 O5

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-31-3 CAPLUS

CN Pentanoic acid, 4-[[[1-[(2S)-2-(acetylamino)-6-amino-1-oxohexyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-5-amino-5-oxo-, (4S)- (CA INDEX NAME)

RN 871811-32-4 CAPLUS

CN Pentanoic acid, 4-[[[1-[(2S)-2-(acetylamino)-6-amino-1-oxohexyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-5-amino-5-oxo-, (4S)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 871811-31-3 CMF C25 H37 N5 O6

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-33-5 CAPLUS

CN Butanoic acid, 4-amino-3-[[[1-(3-amino-1-oxopropyl)-4-phenyl-4-piperidinyl]carbonyl]amino]-4-oxo-, (3S)- (CA INDEX NAME)

$$HO_2C$$
 $H_2N$ 
 $O$ 
 $Ph$ 
 $NH_2$ 

RN 871811-34-6 CAPLUS

CN L- $\alpha$ -Asparagine,  $\beta$ -alanyl-4-phenyl-4-piperidinecarbonyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 871811-33-5 CMF C19 H26 N4 O5

Absolute stereochemistry.

$$\begin{array}{c|c} & & & & \\ & & & \\ \text{Ho2C} & & & \\ & & & \\ \text{H}_2\text{N} & & \\ \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-35-7 CAPLUS

CN L-Asparagine, N2-acetyl-L-lysyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

RN 871811-36-8 CAPLUS

CN L-Asparagine, N2-acetyl-L-lysyl-4-phenyl-4-piperidinecarbonyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 871811-35-7 CMF C24 H35 N5 O6

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-37-9 CAPLUS

CN L-Aspartic acid, N2-acetyl-N6-(1-methylethyl)-L-lysyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

RN 871811-38-0 CAPLUS

CN L-Aspartic acid, N2-acetyl-N6-(1-methylethyl)-L-lysyl-4-phenyl-4-piperidinecarbonyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 871811-37-9 CMF C27 H40 N4 O7

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-40-4 CAPLUS

CN D-Aspartic acid, N2-acetyl-L-lysyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

RN 871811-41-5 CAPLUS

CN D-Aspartic acid, N2-acetyl-L-lysyl-4-phenyl-4-piperidinecarbonyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 871811-40-4 CMF C24 H34 N4 O7

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-42-6 CAPLUS

CN L-Aspartic acid, N-[[4-phenyl-1-(3-pyridinylcarbonyl)-4-piperidinyl]carbonyl]- (CA INDEX NAME)

RN 871811-43-7 CAPLUS
CN L-Aspartic acid, N-[[4-phenyl-1-(3-pyridinylcarbonyl)-4-piperidinyl]carbonyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 871811-42-6
CMF C22 H23 N3 O6

Absolute stereochemistry.

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

CM 2

CRN 76-05-1

CMF C2 H F3 O2

RN 871811-44-8 CAPLUS
CN D-Aspartic acid, N2-acetyl-D-lysyl-4-phenyl-4-piperidinecarbonyl- (9CI)
(CA INDEX NAME)

RN 871811-45-9 CAPLUS

CN D-Aspartic acid, N2-acetyl-D-lysyl-4-phenyl-4-piperidinecarbonyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 871811-44-8 CMF C24 H34 N4 O7

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-46-0 CAPLUS

CN L-Aspartic acid, N-[[4-phenyl-1-(4-piperidinylacetyl)-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

RN 871811-47-1 CAPLUS
CN L-Aspartic acid, N-[[4-phenyl-1-(4-piperidinylacetyl)-4-piperidinyl]carbonyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 871811-46-0
CMF C23 H31 N3 O6

Absolute stereochemistry.

CM 2

CRN 76-05-1

CMF C2 H F3 O2

RN 871811-48-2 CAPLUS
CN L-Aspartic acid, N-[[4-phenyl-1-(1-piperazinylacetyl)-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

RN 871811-49-3 CAPLUS

CN L-Aspartic acid, N-[[4-phenyl-1-(1-piperazinylacetyl)-4-piperidinyl]carbonyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 871811-48-2 CMF C22 H30 N4 O6

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-50-6 CAPLUS

CN Butanoic acid, 4-amino-3-[[[1-[(2S)-2,6-diamino-1-oxohexyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-4-oxo-, (3S)- (CA INDEX NAME)

RN 871811-51-7 CAPLUS

CN Butanoic acid, 4-amino-3-[[[1-[(2S)-2,6-diamino-1-oxohexyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-4-oxo-, (3S)-, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 871811-50-6 CMF C22 H33 N5 O5

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-52-8 CAPLUS

CN L-Aspartic acid, L-lysyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

RN 871811-53-9 CAPLUS

CN L-Aspartic acid, L-lysyl-4-phenyl-4-piperidinecarbonyl-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 871811-52-8 CMF C22 H32 N4 O6

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-55-1 CAPLUS

CN L-Glutamic acid, N2-acetyl-L-lysyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

RN 871811-56-2 CAPLUS

CN L-Glutamic acid, N2-acetyl-L-lysyl-4-phenyl-4-piperidinecarbonyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 871811-55-1 CMF C25 H36 N4 O7

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-57-3 CAPLUS

CN L-Aspartic acid, N2-acetyl-D-lysyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

RN 871811-58-4 CAPLUS

CN L-Aspartic acid, N2-acetyl-D-lysyl-4-phenyl-4-piperidinecarbonyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 871811-57-3 CMF C24 H34 N4 O7

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-59-5 CAPLUS

CN L-Aspartic acid, N-[[1-[(2S)-2-[(3R)-3-amino-2-oxo-1-pyrrolidinyl]-4-methyl-1-oxopentyl]-4-phenyl-4-piperidinyl]carbonyl]- (CA INDEX NAME)

RN 871811-60-8 CAPLUS

CN L-Aspartic acid, N-[[1-[(2S)-2-[(3R)-3-amino-2-oxo-1-pyrrolidinyl]-4-methyl-1-oxopentyl]-4-phenyl-4-piperidinyl]carbonyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 871811-59-5 CMF C26 H36 N4 O7

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-63-1 CAPLUS

CN L-Aspartic acid, N2-[(6-methyl-3-pyridinyl)carbonyl]-L-lysyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

RN 871811-64-2 CAPLUS

CN L-Aspartic acid, N2-[(6-methyl-3-pyridinyl)carbonyl]-L-lysyl-4-phenyl-4-piperidinecarbonyl-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 871811-63-1 CMF C29 H37 N5 O7

Absolute stereochemistry.

$$_{\text{HO}_2\text{C}}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-65-3 CAPLUS

CN L-Aspartic acid, N2-(3-pyridinylcarbonyl)-L-lysyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

RN 871811-66-4 CAPLUS

CN L-Aspartic acid, N2-(3-pyridinylcarbonyl)-L-lysyl-4-phenyl-4-piperidinecarbonyl-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 871811-65-3 CMF C28 H35 N5 O7

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-67-5 CAPLUS

CN L-Aspartic acid, N2-acetyl-L-arginyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

RN 871811-68-6 CAPLUS

CN L-Aspartic acid, N2-acetyl-L-arginyl-4-phenyl-4-piperidinecarbonyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 871811-67-5 CMF C24 H34 N6 O7

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 871811-69-7 CAPLUS

CN L-Aspartic acid, N-[(1-acetyl-4-phenyl-4-piperidinyl)carbonyl]- (CA INDEX NAME)

RN 871811-70-0 CAPLUS

CN Butanoic acid, 4-amino-3-[[[1-(2-aminoacetyl)-4-phenyl-4-piperidinyl]carbonyl]amino]-4-oxo-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 871811-74-4 CAPLUS

CN Butanoic acid, 3-[[[1-[(2S)-2-(acetylamino)-5-amino-1-oxopentyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-4-amino-4-oxo-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 871811-75-5 CAPLUS

CN L-Aspartic acid, N-methyl-L-leucyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 871811-76-6 CAPLUS

CN Butanoic acid, 4-[[[1-[(2S)-2-(acetylamino)-6-amino-1-oxohexyl]-4-phenyl-4-piperidinyl]carbonyl]amino]- (CA INDEX NAME)

RN 871811-77-7 CAPLUS

CN Glycine, N2-acetyl-L-lysyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 871811-80-2 CAPLUS

CN L-Aspartic acid, N-acetyl-3-(4-piperidinyl)alanyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 871811-81-3 CAPLUS

CN  $\beta$ -Alanine, N-acetyl-3-(4-piperidinyl)alanyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

RN 871811-82-4 CAPLUS

CN L-Aspartic acid, N2-acetyl-N6-(3-pyridinylcarbonyl)-L-lysyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 871811-83-5 CAPLUS

CN Butanoic acid, 3-[[[1-[(2S)-2-(acetylamino)-6-amino-1-oxohexyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-4-(ethylamino)-4-oxo-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 21 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:1289826 CAPLUS Full-text

DOCUMENT NUMBER: 144:36328

TITLE: Preparation of substituted thiazoleacetic acids as

CRTH2 receptor ligands

INVENTOR(S): Ulven, Trond; Frimurer, Thomas; Rist, Oeystein;

Kostenis, Evi; Hoegberg, Thomas; Receveur, Jean-Marie;

Grimstrup, Marie

PATENT ASSIGNEE(S): 7TM Pharma A/S, Den. SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.		KIND	DATE	APPL	ICATION		DATE			
WO 20051160	01	A1	20051208	WO 2	005-EP58	82		20	0050	530
W: AE,	AG, AL,	AM, AT	, AU, AZ,	BA, BB,	BG, BR,	BW,	BY,	BΖ,	CA,	CH,
CN,	CO, CR,	CU, CZ	, DE, DK,	DM, DZ,	EC, EE,	EG,	ES,	FI,	GB,	GD,
GE,	GH, GM,	HR, HU	, ID, IL,	IN, IS,	JP, KE,	KG,	KM,	KP,	KR,	KΖ,
LC,	LK, LR,	LS, LT	, LU, LV,	MA, MD,	MG, MK,	MN,	MW,	MX,	MZ,	NA,
NG,	NI, NO,	NZ, OM	, PG, PH,	PL, PT,	RO, RU,	SC,	SD,	SE,	SG,	SK,
SL,	SM, SY,	TJ, TM	, TN, TR,	TT, TZ,	UA, UG,	US,	UZ,	VC,	VN,	YU,
ZA,	ZM, ZW									

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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
                  AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
                  EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
                  RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
                  MR, NE, SN, TD, TG
                                                            AU 2005-247610
       AU 2005247610
                                    Α1
                                             20051208
                                                                                                20050530
       CA 2568742
                                    Α1
                                             20051208
                                                              CA 2005-2568742
                                                                                                20050530
                                             20070307 EP 2005-748037
       EP 1758874
                                                                                                20050530
                                    Α1
            R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
                  IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA,
                  HR, LV, MK, YU
                                             20070613
                                                              CN 2005-80022519
       CN 1980908
                                    Α
                                                                                                20050530
      BR 2005011671 A 20080102 BR 2005-11671
JP 2008503447 T 20080207 JP 2007-513845
MX 2006PA13924 A 20070718 MX 2006-PA13924
NO 2006006049 A 20070227 NO 2006-6049
KR 2007044404 A 20070427 KR 2006-727509
IN 2006CN04780 A 20070629 IN 2006-CN4780
US 20080119456 A1 20080522 US 2007-597839
RITY APPLIN. INFO:
                                                                                                20050530
                                                                                               20050530
                                                                                              20061129
                                                                                               20061228
                                                                                              20061228
                                                              IN 2006-CN4780 20061228

US 2007-597839 20070914

GB 2004-12198 A 20040529

GB 2004-14194 A 20040624

GB 2004-24016 A 20041029

WO 2005-EP5882 W 20050530
PRIORITY APPLN. INFO.:
OTHER SOURCE(S): MARPAT 144:36328
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OTHER SOURCE(S): MARPAT 144:36328
GI

H—(B) q L<sup>4</sup>—Ar<sup>2</sup>—L<sup>2</sup> 
$$X^1$$
Q<sup>1</sup>— $X^3$ —Ar<sup>3</sup>—H

Title compds. I [X1 = S, O, N=N, etc.; A = carboxy, carboxy bioisostere; Ar2-3 = Ph, 5-6 membered heteroaryl, etc.; B = Ar2-3, N-pyrrolidinyl, etc.; q = 0-1; L1-4 = (Alk1)m-Zn-(Alk2)p; m, n, p = 0-1; Alk1-2 = alkylene, alkenylene, etc.; Z = O, S, CO, SO2, etc.; Q1 = H, alkyl; Q2 = alkyl, alkoxy, OH, hydroxyalkyl, etc.] are prepared For instance, [2-benzhydryl-4-(4-chlorophenyl)thiazol-5-yl]acetic acid (II) is prepared from 3-bromo-4-(4-chlorophenyl)-4-oxobutyric acid and 2,2- diphenylthioacetamide in 77% yield. II has an IC50 < 0.5  $\mu$ M for the CRTH2 receptor. I are useful for the treatment of disease responsive to modulation of CRTH2 receptor activity.

IT 870862-27-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of substituted thiazoleacetic acids as CRTH2 receptor ligands)

RN 870862-27-4 CAPLUS

CN 4-Piperidinecarbothioamide, 1-acetyl-4-phenyl- (CA INDEX NAME)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 22 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1289687 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 144:51568

TITLE: Preparation of substituted 2-quinolyl-oxazoles and

their heterocyclic analogs useful as pde4 inhibitors

INVENTOR(S): Kuang, Rongze; Blythin, David; Shih, Neng-Yang; Shue, Ho-Jane; Chen, Xiao; Cao, Jianhua; Gu, Danlin; Huang,

Ying; Schwerdt, John H.; Ting, Pauline C.; Wong,

Shing-Chun; Xiao, Li

PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: PCT Int. Appl., 233 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIND DATE			APPLICATION NO.					DATE					
WO 2	2005:	1160	09		A1		2005	1208		WO 2	005-1	US17	134		2	0050	516
	W:										BG,					CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
											JP,						
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,
		NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,
		SL,	SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,
		ZA,	ZM,	ZW													
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	ΙΤ,	LT,	LU,	MC,	NL,	PL,	PT,
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,
				•	TD,												
	20052		06								005-					0050	
	2565				A1		2005				005-				_	0050	
	2006						2006				005-					0050	
EP 1	17588				A1		2007				005-					0050	
	R:	,	•	,	,	,	•	•	,	,	ES,	•	,	•	•	,	•
			IT, LV,		•	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,	BA,
CN 1	19849	901			А		2007	0620		CN 2	005-	8002	3666		2	0050	516
BR 2	20050	0112	95		Α		2007	1204		BR 2	005-	1129	5		2	0050	516
JP 2	2007	5373	00		Τ		2007	1220		JP 2	007-	5134	71		2	0050	516
TW 2	2864	75			В		2007	0911		TW 2	005-	9411	5924		2	0050	517
MX 2	20061	PA13	414		Α		2007	0123		MX 2	006-1	PA13	414		2	0061	117
KR 2	20070	0133	06		Α		2007	0130		KR 2	006-	7241	86		2	0061	117
IN 2	20060	CN04:	254		Α		2007	0629		IN 2	006-0	CN42	54		2	0061	117
NO 2	2006	0058	30		Α		2007	0216		NO 2	006-	5830			2	0061	215
DRITY	APP	LN.	INFO	.:						US 2	004-	5722	66P		P 2	0040	518
										WO 2	005-1	US17	134	1	W 2	0050	516

$$R3$$
 $R2$ 
 $R3$ 
 $R4$ 
 $R5$ 

Ι

AB Title compds. I [R1 = H, alkyl, cycloalkyl; R2, R3 and R5 independently = H or halo; R4 = H, halo, alkyl, etc.; A = substituted oxazolyl, imidazole, thiazole or pyrrole], and their pharmaceutically acceptable salts, are prepared and disclosed as pde4 inhibitors. Thus, e.g., II was prepared in a multistep synthesis from 2-trifluoromethyl-8-methoxyquinolin-5-yl carboxylic acid. In PDE4 assays, selected compds. possessed IC50 values ranging from 0.01-1.8 nM. Also claimed are pharmaceutical compns., the use of the compds. as PDE4 inhibitors, and combinations with other actives.

IT 871000-63-4P 871000-68-9P 871000-79-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted quinolyloxazoles and their heterocyclic analogs useful as PDE4 inhibitors)

RN 871000-63-4 CAPLUS

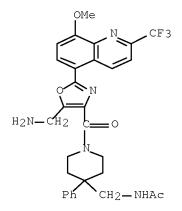
CN 4-Piperidinecarboxamide, 1-[[5-(aminomethyl)-2-[8-methoxy-2-(trifluoromethyl)-5-quinolinyl]-4-oxazolyl]carbonyl]-4-phenyl- (CA INDEX NAME)

RN 871000-68-9 CAPLUS

CN 4-Piperidinecarboxamide, 1-[[5-(aminomethyl)-2-[8-methoxy-2-(trifluoromethyl)-5-quinolinyl]-4-oxazolyl]carbonyl]-N-methyl-4-phenyl-(CA INDEX NAME)

RN 871000-79-2 CAPLUS

CN Acetamide, N-[[1-[[5-(aminomethyl)-2-[8-methoxy-2-(trifluoromethyl)-5-quinolinyl]-4-oxazolyl]carbonyl]-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 23 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:704280 CAPLUS Full-text

DOCUMENT NUMBER: 143:367569

TITLE: A Combinatorial Approach toward the Generation of

Ambiphilic Peptide-Based Inhibitors of Protein:Geranylgeranyl Transferase-1

AUTHOR(S): El Oualid, Farid; van den Elst, Hans; Leroy, Ingrid

M.; Pieterman, Elsbeth; Cohen, Louis H.; Burm,

Brigitte E. A.; Overkleeft, Herman S.; van der Marel,

Gijs A.; Overhand, Mark

CORPORATE SOURCE: Leiden Institute of Chemistry, Gorlaeus Laboratories,

Leiden University, Leiden, 2300 RA, Neth.

SOURCE: Journal of Combinatorial Chemistry (2005), 7(5),

703-713

CODEN: JCCHFF; ISSN: 1520-4766

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 143:367569

AB A combinatorial synthesis of oligopeptide analogs and their evaluation as protein geranylgeranyl transferase inhibitors is presented. The combinatorial strategy is based on the random mutation, in each new generation, of one of any of the four amino acid building blocks of which the most effective compds. of the previous generation are assembled. In this way, a progressive improvement of the average inhibitory activity was observed until the fifth generation. The most active inhibitors were found to inhibit PGGT-1 in the low micromolar range (IC50 =  $3.8-8.1~\mu\text{M}$ ).

IT 866225-36-7P 866225-77-6P

RL: BSU (Biological study, unclassified); CPN (Combinatorial preparation); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation) (solid-phase combinatorial preparation of peptide derivs. as inhibitors of protein geranylgeranyl transferase-1)

RN 866225-36-7 CAPLUS

CN L-Aspartic acid, N-methyl-N-(4-nitrobenzoyl)glycyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 866225-77-6 CAPLUS

CN L-Phenylalanine, N-[(phenylmethoxy)carbonyl]-L-histidyl-3-piperidinecarbonyl-4-piperidinecarbonyl-4-nitro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 24 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:698366 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 143:166724

TITLE: Prodrugs of potassium channel inhibitors, and

preparation thereof

INVENTOR(S): Gross, Michael F.; Lloyd, John

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 25 pp., Cont.-in-part of U.S.

Ser. No. 417,355.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND D	DATE Z	APPLICATION NO.	DATE
US 20050171156	A1 2	20050804	US 2005-28399	20050103
US 20040110793	A1 2	20040610 t	US 2003-417355	20030416
US 7005436	B2 2	20060228		
US 20060014792	A1 2	20060119 t	US 2005-186991	20050721
WO 2006073967	A1 2	20060713	WO 2005-US47183	20051227
W: AE, AG, AL,	AM, AT,	AU, AZ, BA,	BB, BG, BR, BW,	BY, BZ, CA, CH,
CN, CO, CR,	CU, CZ,	DE, DK, DM,	DZ, EC, EE, EG,	ES, FI, GB, GD,
GE, GH, GM,	HR, HU,	ID, IL, IN,	IS, JP, KE, KG,	KM, KN, KP, KR,
KZ, LC, LK,	LR, LS,	LT, LU, LV,	LY, MA, MD, MG,	MK, MN, MW, MX,
MZ, NA, NG,	NI, NO,	NZ, OM, PG,	PH, PL, PT, RO,	RU, SC, SD, SE,

SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM EP 1841741 20071010 EP 2005-855697 Α1 20051227 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR PRIORITY APPLN. INFO.: US 2002-374279P P 20020419 US 2003-417355 A2 20030416 US 2005-28399 A 20050103 WO 2005-US47183 W 20051227 OTHER SOURCE(S): CASREACT 143:166724; MARPAT 143:166724

GI

AB The invention discloses compds. useful as prodrugs of potassium channel inhibitor compds., in particular as prodrugs of Kv1.5 channel inhibitors. Preparation of compds. of the invention, e.g. I, is described.

IT 619292-31-8P 619292-32-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(potassium channel inhibitor prodrugs, and preparation)

RN 619292-31-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(3-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619292-32-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(3-fluorophenyl)-4-[[(2-methoxybenzoyl)amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

L3 ANSWER 25 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:470969 CAPLUS Full-text

DOCUMENT NUMBER: 143:26636

TITLE: Preparation of 4-[(Arylmethyl)aminomethyl]piperidines

as inhibitors of NGF binding (nerve growth factor) to p75NTR (p75 neurotrophic) receptor for treating p75NTR

related diseases

INVENTOR(S):
Bosch, Michael; Wagnon, Jean

PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr. SOURCE: Fr. Demande, 31 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.						APPLICATION NO.										
	2862				A1		2005	0603			2003-					0031	201
FR	2862	968			В1		2006	0804									
WO	2005	0542	29		A1		2005	0616		WO	2004-	FR30	66		2	0041	130
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB	, BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	, EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	, JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG	, MK,	MN,	MW,	MX,	MZ,	NA,	NΙ,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU	, SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ΤJ,	TM,	TN,	TR,	ΤΤ,	TZ,	UA,	UG,	US	, UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD	, SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT	, BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,	IS	, IT,	LU,	MC,	NL,	PL,	PT,	RO,
		SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI	, CM,	GA,	GN,	GQ,	GW,	ML,	MR,
		ΝE,	SN,	TD,	TG												
EP	1694	668			A1		2006	0830		ΕP	2004-	8055	90		2	0041	130
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		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TR,	BG,	CZ,	EE,	HU,	PL,	SK,
		HR,	IS,	YU													
JP	2007	5123	84		Τ		2007	0517		JΡ	2006-	5419	74		2	0041	130
US	2007	0037	819		A1		2007	0215		US	2006-	4205	05		2	0060	526
RIORIT	Y APP	LN.	INFO	.:						FR	2003-	1417.	2		A 2	0031	201
										WO	2004-	FR30	66	1	W 2	0041	130
OTHER SO	OURCE	(S):			MARI	PAT	143:	2663	6								

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

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AΒ
     Title compds. I [wherein X = (CH2)n; n = 1-2; R1 = CF3; R2 = H, alky1; R3 = 1-2
     (un) substituted pyrrolyl, 1,2,3-thiadiazolyl, pyrazinyl, etc.; and their
     salts, hydrates and solvates] were prepared as inhibitors of the binding of
     125I NGF to p75NTR (p75 neurotrophic) receptor and of the apoptosis induced by
     NGF (nerve growth factor) for treating p75NTR related diseases (no data). For
     example, II was prepared by reacting 1-[4-(aminomethyl)-4-[3-
     (trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]- 1-
     ethanone (preparation given) and 1-methyl-2-pyrrolecarboxaldehyde in THF in
     the presence of NaBH(OAc)3/AcOH. I inhibited the binding of 125I NGF to
     p75NTR receptor with IC50 in the range of 10-11 M to 10-6 M at the biochem.
     level. I inhibited the pro-apoptic effect induced by NGF, via growing cells
     expressing preferentially p75NTR, with IC50 in the range of 10-11 M to 10-6 M
     at the cellular level.
     852936-29-9F, [(1-Methyl-1H-pyrrol-2-yl)methyl][[1-[[4-(pyrazin-2-
ΤТ
     v1)piperazin-1-v1]acety1]-4-[3-(trifluoromethy1)phenv1]piperidin-4-
     yl]methyl]amine 852936-31-3P 852936-32-4P,
     N-Methyl-1-[1-[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidin-4-yl]-N-[(1,3-thiazol-2-
     yl)methyl]methanamine trihydrochloride 852936-33-5P,
     (2-Furylmethyl) [[1-[[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine 852936-34-6P
     , (3-Furylmethyl)[[1-[[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine 852936-35-7P
     , [(5-Methyl-2-furyl)methyl][[1-[[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-
     [3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine
     852936-36-8P, [(4,5-Dimethyl-2-furyl)methyl](methyl)[[1-[[4-
     (pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidi
     n-4-yl]methyl]amine trihydrochloride 852936-37-9P,
     [(5-Chloro-2-furyl)methyl](methyl)[[1-[[4-(pyrazin-2-yl)piperazin-1-
     yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine
     852936-38-0P, [[1-[[4-(Pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidin-4-yl]methyl][(2-thienyl)methyl]amine
     852936-39-1P, [[1-[[4-(Pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidin-4-yl]methyl][(3-thienyl)methyl]amine
     852936-40-4P, 1-Phenyl-N-[[1-[[4-(pyrazin-2-yl)piperazin-1-
     yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]methanamine
     852936-41-5P, [[1-[[4-(Pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidin-4-yl]methyl][(pyridin-2-yl)methyl]amine
     852936-42-6P, N-Methyl-1-[1-[[4-(pyrazin-2-yl)piperazin-1-
     yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]-N-[(pyridin-2-
     yl)methyl]methanamine 852936-43-7P, N-Methyl-1-[1-[4-(pyrazin-2-
     yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]-N-
     [(pyridin-3-yl)methyl]methanamine tetrahydrochloride 852936-44-8P
     , N-Methyl-1-[1-[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidin-4-yl]-N-[(pyridin-4-
     yl)methyl]methanamine tetrahydrochloride 852936-45-9P,
     N-Methyl-1-(pyrazin-2-yl)-N-[[1-[[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-
     [3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]methanamine
     tetrahydrochloride 852936-46-0P, [(6-Methylpyridin-2-
     yl)methyl][[1-[[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine 852936-47-1P
     , [(3-Methyl-2-thienyl)methyl][[1-[[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-
     4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine trihydrochloride
     852936-48-2P 852936-49-3P, N-Methyl-1-[1-[[4-(pyrazin-2-
     yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]-N-
     [(pyrimidin-5-yl)methyl]methanamine 852936-50-6P,
     (1H-Imidazol-2-ylmethyl) (methyl) [[1-[[4-(pyrazin-2-yl)piperazin-1-
     yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine
     852936-51-7P, (1H-Imidazol-5-ylmethyl)(methyl)[[1-[[4-(pyrazin-2-
```

yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine tetrahydrochloride 852936-52-8P,
N-Methyl-1-(4-methyl-1H-imidazol-5-yl)-N-[[1-[[4-(pyrazin-2-yl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]pyridin-4-yl]methyl]methanamine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of 4-[(arylmethyl)] aminomethyl] piperidines as NGF binding inhibitors to p75NTR receptor and of the apoptosis induced by NGF)

RN 852936-29-9 CAPLUS

CN Ethanone, 1-[4-[[[(1-methyl-1H-pyrrol-2-yl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

RN 852936-31-3 CAPLUS

CN Ethanone, 1-[4-[[methyl](1-methyl-1H-imidazol-2-yl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, ethanedioate (1:1) (CA INDEX NAME)

CM 1

CRN 852936-30-2 CMF C29 H37 F3 N8 O

$$\begin{array}{c}
\text{Me} \\
\text{N} \\
\text{CH}_2 \\
\text{N} \\
\text{CH}_2 \\
\text{CH}_2
\end{array}$$

$$\begin{array}{c}
\text{N} \\
\text{C} \\
\text{CH}_2
\end{array}$$

$$\begin{array}{c}
\text{N} \\
\text{N}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 852936-32-4 CAPLUS

CN Ethanone, 1-[4-[[methyl(2-thiazolylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

●3 HC1

RN 852936-33-5 CAPLUS

CN Ethanone, 1-[4-[[(2-furanylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

RN 852936-34-6 CAPLUS

CN Ethanone, 1-[4-[[(3-furanylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

RN 852936-35-7 CAPLUS

CN Ethanone, 1-[4-[[[(5-methyl-2-furanyl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

RN 852936-36-8 CAPLUS

CN Ethanone, 1-[4-[[[(4,5-dimethyl-2-furanyl)methyl]methylamino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

●3 HC1

RN 852936-37-9 CAPLUS

CN Ethanone, 1-[4-[[[(5-chloro-2-furanyl)methyl]methylamino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

RN 852936-38-0 CAPLUS

CN Ethanone, 2-[4-(2-pyrazinyl)-1-piperazinyl]-1-[4-[[(2-thienylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-(CA INDEX NAME)

RN 852936-39-1 CAPLUS

CN Ethanone, 2-[4-(2-pyrazinyl)-1-piperazinyl]-1-[4-[[(3-thienylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-(CA INDEX NAME)

RN 852936-40-4 CAPLUS

CN Ethanone, 1-[4-[[(phenylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{CF 3} \\ \text{O} \\ \text{N} \\ \text{N} \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{NH} \\ \text{CH}_2 \\ \text{Ph} \\ \text{CH}_2 \\ \text{Ph} \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{Ph} \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{Ph} \\ \text{CH}_2 \\ \text{CH}_2$$

RN 852936-41-5 CAPLUS

CN Ethanone, 2-[4-(2-pyrazinyl)-1-piperazinyl]-1-[4-[[(2-pyridinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-(CA INDEX NAME)

RN 852936-42-6 CAPLUS

CN Ethanone, 1-[4-[[methyl(2-pyridinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

$$\begin{array}{c} \text{F3C} \\ \text{O} \\ \text{O} \\ \text{II} \\ \text{O} \\ \text{CH2} \\ \text{II} \\ \text{CH2} \\ \text{CH2} \\ \text{II} \\ \text{CH2} \\ \text{CH2}$$

RN 852936-43-7 CAPLUS

CN Ethanone, 1-[4-[[methyl(3-pyridinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:4) (CA INDEX NAME)

$$\begin{array}{c} \text{F}_3\text{C} \\ \text{O} \\ \text{CH}_2 \\ \text{N} \end{array} \begin{array}{c} \text{Me} \\ \text{CH}_2 \\ \text{N} \end{array} \begin{array}{c} \text{CH}_2 \\ \text{N} \end{array}$$

●4 HCl

RN 852936-44-8 CAPLUS

CN Ethanone, 1-[4-[[methyl(4-pyridinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:4) (CA INDEX NAME)

RN 852936-45-9 CAPLUS

CN Ethanone, 1-[4-[[methyl(2-pyrazinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:4) (CA INDEX NAME)

$$\begin{array}{c} \text{F}_3\text{C} \\ \text{O} \\ \text{CH}_2 \\ \text{N} \end{array} \begin{array}{c} \text{Me} \\ \text{CH}_2 \\ \text{N} \end{array} \begin{array}{c} \text{Me} \\ \text{CH}_2 \\ \text{N} \end{array}$$

●4 HCl

RN 852936-46-0 CAPLUS

CN Ethanone, 1-[4-[[(6-methyl-2-pyridinyl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

$$\begin{array}{c} \text{F}_{3}\text{C} \\ \text{O} \\ \text{N} \\ \text{O} \\ \text{N} \\ \text{O} \\ \text{CH}_{2} - \text{NH} - \text{CH}_{2} \\ \text{NH} \\ \text{O} \\ \text{N} \\ \text{Me} \\ \end{array}$$

RN 852936-47-1 CAPLUS

CN Ethanone, 1-[4-[[[(3-methyl-2-thienyl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

$$\begin{array}{c} \text{S} \\ \text{CH}_2 - \text{NH} - \text{CH}_2 \\ \text{Me} \end{array}$$

3 HCl

RN 852936-48-2 CAPLUS

CN Ethanone, 1-[4-[[methyl](5-methyl-2-thienyl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:1) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{S} \\ \text{CH}_2 \\ \text{N} \\ \text{CH}_2 \\ \text{OH}_2 \\ \text{OH}_2 \\ \text{N} \\ \text{OH}_2 \\ \text{N} \\ \text{OH}_2 \\ \text{N} \\ \text{N} \\ \text{OH}_2 \\ \text{N} \\ \text$$

● HCl

RN 852936-49-3 CAPLUS

CN Ethanone, 1-[4-[[methyl(5-pyrimidinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

RN 852936-50-6 CAPLUS

CN Ethanone, 1-[4-[[(1H-imidazol-2-ylmethyl)methylamino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

$$\begin{array}{c}
\text{Me} \\
\text{N}
\end{array}$$

$$\begin{array}{c}
\text{CH}_2 \\
\text{N}
\end{array}$$

$$\begin{array}{c}
\text{N} \\
\text{CH}_2
\end{array}$$

$$\begin{array}{c}
\text{N} \\
\text{N}
\end{array}$$

$$\begin{array}{c}
\text{N} \\
\text{N}
\end{array}$$

RN 852936-51-7 CAPLUS

CN Ethanone, 1-[4-[[(1H-imidazol-5-ylmethyl)methylamino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:4) (CA INDEX NAME)

$$\begin{array}{c}
H \\
N \\
CH_2
\end{array}$$

$$\begin{array}{c}
Me \\
CH_2
\end{array}$$

$$\begin{array}{c}
CH_2
\end{array}$$

$$\begin{array}{c}
N \\
CH_2
\end{array}$$

$$\begin{array}{c}
N \\
CH_2
\end{array}$$

$$\begin{array}{c}
N \\
N \\
N
\end{array}$$

4 HC1

RN 852936-52-8 CAPLUS

CN Ethanone, 1-[4-[[methyl](4-methyl-1H-imidazol-5-yl)methyl]amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]- (CA INDEX NAME)

IT 634461-23-7P, 1-[4-(Aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone
634464-08-7P, 1-[4-[(Methylamino)methyl]-4-[3(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]1-ethanone 634467-77-9P, tert-Butyl [1-(2-Chloroacetyl)-4-[3(trifluoromethyl)phenyl]-4-piperidinyl]methylcarbamate
634468-41-0P, tert-Butyl [[1-(2-chloroacetyl)-4-[3(trifluoromethyl)phenyl]-4-piperidinyl]methyl]methylcarbamate
634469-57-1P, tert-Butyl [[1-[2-[4-(2-pyrazinyl)-1piperazinyl]ethanoyl]-4-[3-(trifluoromethyl)phenyl]-4piperidinyl]methyl]carbamate 852936-54-0P, tert-Butyl
[[1-[2-[4-(2-pyrazinyl)-1-piperazinyl]acetyl]-4-[3(trifluoromethyl)phenyl]-4-piperidinyl]methyl]carbamate

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of 4-[(arylmethyl)aminomethyl] piperidines as NGF binding inhibitors to p75NTR receptor and of the apoptosis induced by NGF)

RN 634461-23-7 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]- (CA INDEX NAME)

RN 634464-08-7 CAPLUS

CN Ethanone, 1-[4-[(methylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]- (CA INDEX NAME)

RN 634467-77-9 CAPLUS

CN Carbamic acid, [[1-(chloroacetyl)-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 634468-41-0 CAPLUS

CN Carbamic acid, [[1-(chloroacetyl)-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 634469-57-1 CAPLUS

CN Carbamic acid, [[1-[(4-pyrazinyl-1-piperazinyl)acetyl]-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 852936-54-0 CAPLUS

CN Carbamic acid, methyl[[1-[(4-pyrazinyl-1-piperazinyl)acetyl]-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CF 3} \\ \text{Me O} \\ \text{CH}_2 - \text{N} - \text{C} - \text{OBu-t} \end{array}$$

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 26 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:470968 CAPLUS Full-text

DOCUMENT NUMBER: 143:26635

TITLE: Preparation of (4-Phenylpiperazin-1-yl)acylpiperidine

derivatives as inhibitors of NGF binding (nerve growth

factor) to p75NTR (p75 neurotrophic) receptor for

treating p75NTR related diseases

INVENTOR(S): Dos Santos, Victor; Wagnon, Jean

PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr. SOURCE: Fr. Demande, 49 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

				KIND DATE				APPLICATION NO.									
	2862 2862				A1		2005 2006									0031	201
WO	2005	0542	27		A1		2005	0616		WO 2	004-	FR30	67		2	0041	130
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
							DE,										
							ID,										
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	ΝI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
							TZ,										
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,	IS,	IT,	LU,	MC,	NL,	PL,	PT,	RO,
		SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,
		NE,	SN,	TD,	TG												
EP	1699	778			A1 20060913			EP 2004-805591					20041130				
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,
		HR,	IS														
JP	2007	5123	85		T		2007	0517		JP 2	006-	5419	75		2	0041	130
US	2007	0021	609		A1		2007	0125		US 2	006-	4205	08		2	0060	526
PRIORIT	Y APP	LN.	INFO	.:						FR 2	003-	1417	3		A 2	0031	201
										WO 2	004 - 1	FR30	67	,	W 2	0041	130
OTHER SO	OURCE	(S):			MAR.	PAT	143:	2663.	5								

$$R^{2}$$
 $N$ 
 $X-N$ 
 $N-R^{4}$ 

AB Title compds. I [wherein n = 1-2; R1 = halo, CF3, alkyl, alkoxy, OCF3; R2 = H, halo; R3 = H, OH and derivs., NH2 and derivs., etc.; R4 = (un) substituted Ph; their free bases, or acid addition salts, and their hydrates or solvates] were prepared as inhibitors of the binding of 125I NGF to p75NTR (p75 neurotrophic)

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receptor and of the apoptosis induced by NGF (nerve growth factor) for
     treating p75NTR related diseases (no data). For example, II. HCl was prepared
     by reacting 2-chloro-1-[4-hydroxy-4-[3- (trifluoromethyl)phenyl]-1-
     piperidinyl]-1-ethanone (preparation given) with 1-[3-
     (trifluoromethyl)phenyl]piperazine in the presence of KI/K2CO3/MeCN. I
     inhibited the binding of 125I NGF to p75NTR receptor with IC50 in the range of
     10-11 M to 10-6 M at the biochem. level. I inhibited the pro-apoptic effect
     induced by NGF, via growing cells expressing preferentially p75NTR, with IC50
     in the range of 10-11 M to 10-6 M at the cellular level.
ΙT
     852937-04-3P, [[1-[(4-Phenylpiperazin-1-yl)acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine trihydrochloride
     852937-05-4P, (2-Furylmethyl)[[1-[(4-phenylpiperazin-1-yl)acetyl]-
     4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine
     852937 - 06 - 5P, [[1-[(4-Phenylpiperazin-1-yl)acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidin-4-yl]methyl][(2-thienyl)methyl]amine
     852937-09-8P 852937-11-2P, [[1-[(4-Phenylpiperazin-1-
     yl)acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl][(pyridin-3-
     yl)methyl]amine dioxalate 852937-13-4P 852937-14-5P,
     N-Methyl-1-[1-[(4-phenylpiperazin-1-yl)acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidin-4-yl]methanamine dihydrochloride
     852937-15-6P, N,N-Dimethyl-1-[1-[(4-phenylpiperazin-1-yl)acetyl]-4-
     [3-(trifluoromethyl)phenyl]piperidin-4-yl]methanamine 852937-16-79
     , N-Methyl-N-[[1-[(4-phenylpiperazin-1-yl)acetyl]-4-[3-yl]
     (trifluoromethyl)phenyl]piperidin-4-yl]methyl]ethanamine dihydrochloride
     852937-17-8P, [[1-[[4-(4-Fluorophenyl)piperazin-1-yl]acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine trihydrochloride
     852937-18-9P, [[1-[[4-(3-Methoxyphenyl)piperazin-1-yl]acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine dihydrochloride
     852937-19-0P, [[1-[[4-(3,4-Dichlorophenyl)piperazin-1-yl]acetyl]-4-
     [3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine
     852937-20-3P, [[1-[[4-(2,4-Dimethylphenyl)piperazin-1-yl]acetyl]-4-
     [3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]methylamine
     dihydrochloride 852937-21-4P, [[1-[[4-(2,4-
     Dimethylphenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperid
     in-4-yl]methyl]dimethylamine dihydrochloride 852937-22-5P,
     [[1-[4-(3,4-Dimethoxyphenyl)piperazin-1-yl]acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine trihydrochloride
     852937-23-6P, [[1-[[4-(3,4-Dimethoxyphenyl)piperazin-1-yl]acetyl]-
     4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]dimethylamine
     trihydrochloride 852937-24-7P, N-Ethyl-N-[[1-[[4-(3-
     methoxyphenyl)piperazin-1-yl]acetyl]-4-[3-(trifluoromethyl)phenyl]piperidi
     n-4-y1]methy1]ethanamine dihydrochloride 852937-26-9P,
     [[1-[[4-(3,4-Dimethoxyphenyl)piperazin-1-yl]acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidin-4-yl]methyl]methylamine
     852937-31-6P, 1-[(4-Phenylpiperazin-1-yl)acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidine-4-carboxamide 852937-32-7P,
     1-[[4-(2,4-Dimethylphenyl)piperazin-1-yl]acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidine-4-carboxamide 852937-33-8P,
     1-[[4-(2,4-Dimethoxyphenyl)piperazin-1-yl]acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidine-4-carboxamide 852937-34-9P,
     1-[[4-(2,4-Dichlorophenyl)piperazin-1-yl]acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidine-4-carboxamide 852937-39-4P,
     [[1-[4-(3,4-Dimethoxyphenyl)piperazin-1-yl]acetyl]-4-[3-
     (trifluoromethyl)phenyl]piperidin-4-yl]methyl][(2-furyl)methyl]methylamine
     852937-40-7P, 9-(3-Furvlmethyl)[[1-[(4-phenylpiperazin-1-
     yl)acetyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine
     852937-41-8P, [[1-[[4-(2,3-Dimethylphenyl)piperazin-1-yl]acetyl]-4-
     [3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]amine
     852937-47-4P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
```

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of phenylpiperazinylacylpiperidines as NGF binding inhibitors to p $75\,\mathrm{NTR}$  receptor and of the apoptosis induced by NGF)

RN 852937-04-3 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)-, hydrochloride (1:3) (CA INDEX NAME)

$$F_{3}C \xrightarrow{\qquad \qquad N \qquad \qquad C \qquad \qquad CH_{2} \qquad \qquad NH_{2}} Ph$$

●3 HCl

RN 852937-05-4 CAPLUS

CN Ethanone, 1-[4-[[(2-furanylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)- (CA INDEX NAME)

RN 852937-06-5 CAPLUS

CN Ethanone, 2-(4-phenyl-1-piperazinyl)-1-[4-[[(2-thienylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)

RN 852937-09-8 CAPLUS

CN Ethanone, 2-(4-phenyl-1-piperazinyl)-1-[4-[[(2-pyridinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-

, ethanedioate (1:1) (CA INDEX NAME)
CM 1
CRN 852937-08-7
CMF C31 H36 F3 N5 O

CM 2

CRN 144-62-7 CMF C2 H2 O4

CRN 852937-10-1 CMF C31 H36 F3 N5 O

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 852937-13-4 CAPLUS

CN Ethanone, 2-(4-phenyl-1-piperazinyl)-1-[4-[[(4-pyridinylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-, ethanedioate (1:1) (CA INDEX NAME)

CM 1

CRN 852937-12-3 CMF C31 H36 F3 N5 O

CM 2

CRN 144-62-7

RN 852937-14-5 CAPLUS

CN Ethanone, 1-[4-[(methylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

RN 852937-15-6 CAPLUS

CN Ethanone, 1-[4-[(dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)- (CA INDEX NAME)

RN 852937-16-7 CAPLUS

CN Ethanone, 1-[4-[(ethylmethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

RN 852937-17-8 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(4-fluorophenyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

●3 HCl

RN 852937-18-9 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(3-methoxyphenyl)-1-piperazinyl]-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

RN 852937-19-0 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(3,4-dichlorophenyl)-1-piperazinyl]- (CA INDEX NAME)

RN 852937-20-3 CAPLUS

CN Ethanone, 2-[4-(2,4-dimethylphenyl)-1-piperazinyl]-1-[4-[(methylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-, hydrochloride (1:2) (CA INDEX NAME)

$$\begin{array}{c} \text{CF3} \\ \text{Me} \\ \text{Me} \end{array}$$

●2 HC1

RN 852937-21-4 CAPLUS

CN Ethanone, 1-[4-[(dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2,4-dimethylphenyl)-1-piperazinyl]-, hydrochloride (1:2) (CA INDEX NAME)

●2 HCl

RN 852937-22-5 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(3,4-dimethoxyphenyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{MeO} \end{array}$$

HC1

RN 852937-23-6 CAPLUS

CN Ethanone, 2-[4-(3,4-dimethoxyphenyl)-1-piperazinyl]-1-[4-[(dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-, hydrochloride (1:3) (CA INDEX NAME)

●3 HCl

RN 852937-24-7 CAPLUS

CN Ethanone, 1-[4-[(diethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(3-methoxyphenyl)-1-piperazinyl]-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

RN 852937-26-9 CAPLUS

CN Ethanone, 2-[4-(3,4-dimethoxyphenyl)-1-piperazinyl]-1-[4-[(methylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)

RN 852937-31-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-(4-phenyl-1-piperazinyl)acetyl]-4-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 852937-32-7 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-[4-(2,4-dimethylphenyl)-1-piperazinyl]acetyl]-4-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 852937-33-8 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-[4-(2,4-dimethoxyphenyl)-1-piperazinyl]acetyl]-4-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 852937-34-9 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-[4-(2,4-dichlorophenyl)-1-piperazinyl]acetyl]-4-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

$$C1$$
 $N$ 
 $CH_2$ 
 $CH_3$ 

RN 852937-39-4 CAPLUS

CN Ethanone, 2-[4-(3,4-dimethoxyphenyl)-1-piperazinyl]-1-[4-[[(2-furanylmethyl)methylamino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c}
\text{OMe} \\
\text{OM$$

RN 852937-40-7 CAPLUS

CN Ethanone, 1-[4-[[(3-furanylmethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)- (CA INDEX NAME)

PAGE 2-A

RN 852937-41-8 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2,3-dimethylphenyl)-1-piperazinyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{CF}_3 \\ \text{N} \\ \text{Me} \end{array}$$

RN 852937-47-4 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-(4-phenyl-1-piperazinyl)-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

634467-77-9P, tert-Butyl [[1-(2-Chloroacetyl)-4-[3-ΤТ (trifluoromethyl)phenyl]-4-piperidinyl]methyl]carbamate 634467-82-6P, 1-(2-Chloroacetyl)-4-[3-(trifluoromethyl)phenyl]-4piperidinecarboxamide 634468-41-0P, tert-Butyl [[1-(2-chloroacetyl)-4-[3-(trifluoromethyl)phenyl]-4piperidinyl]methyl]methylcarbamate 852937-43-0P, tert-Butyl 4-(Aminomethyl)-4-[3-(trifluoromethyl)phenyl]piperidine-1-carboxylate 852937-44-1P, tert-Butyl 4-[(Dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]piperidine-1-carboxylate 852937-48-5P, tert-Butyl [[1-[2-(4-phenylpiperazin-1-yl)ethanoyl]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]carbamate 852937-49-6P, tert-Butyl methyl[[1-[2-(4-phenylpiperazin-1v1)ethanov1]-4-[3-(trifluoromethyl)phenyl]piperidin-4-yl]methyl]carbamate RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; preparation of phenylpiperazinylacylpiperidines as NGF binding inhibitors to p75NTR receptor and of the apoptosis induced by 634467-77-9 CAPLUS RN CN Carbamic acid, [[1-(chloroacetyl)-4-[3-(trifluoromethyl)phenyl]-4-

piperidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 634467-82-6 CAPLUS
CN 4-Piperidinecarboxamide, 1-(2-chloroacetyl)-4-[3-(trifluoromethyl)phenyl](CA INDEX NAME)

RN 634468-41-0 CAPLUS

CN Carbamic acid, [[1-(chloroacetyl)-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 852937-43-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 852937-44-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 852937-48-5 CAPLUS

CN Carbamic acid, [[1-[(4-phenyl-1-piperazinyl)acetyl]-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl]-, 1,1-dimethylethyl ester

RN 852937-49-6 CAPLUS

CN Carbamic acid, methyl[[1-[(4-phenyl-1-piperazinyl)acetyl]-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 27 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:394825 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 142:430293

TITLE: Preparation of quinazolinyl norepinephrine reuptake

inhibitors for the treatment of central nervous system

disorders

INVENTOR(S): Caprathe, Bradley William; Glase, Shelly Ann;

Konstantinou, Zissis; Schelkun, Robert Michael; Sheehan, Susan M.; Thomas, Anthony Jerome; Yuen,

Po-wai

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 44 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	E APPLI	ICATION NO.	DATE			
US 20050096327	A1 2005	50505 US 20	004-979651	20041102			
CA 2543710	A1 2005	50512 CA 20	004-2543710	20041026			
WO 2005042501	A1 2005	50512 WO 20	004-IB3535	20041026			
W: AE, AG, AL,	AM, AT, AU,	AZ, BA, BB,	BG, BR, BW, BY,	BZ, CA, CH,			
CN, CO, CR,	CU, CZ, DE,	DK, DM, DZ,	EC, EE, EG, ES,	FI, GB, GD,			
GE, GH, GM,	HR, HU, ID,	IL, IN, IS,	JP, KE, KG, KP,	KR, KZ, LC,			
LK, LR, LS,	LT, LU, LV,	MA, MD, MG,	MK, MN, MW, MX,	MZ, NA, NI,			
NO. NZ. OM.	PG. PH. PI.	PT. RO. RU.	SC. SD. SE. SG.	SK. SL. SY.			

TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG EP 1685115 20060802 EP 2004-791756 Α1 20041026 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK BR 2004015683 Α 20061219 BR 2004-15683 20041026 JP 2007510642 Τ JP 2006-537469 20070426 20041026 MX 2006-PA5019 MX 2006PA05019 Α 20060706 20060503 PRIORITY APPLN. INFO.: US 2003-516879P Ρ 20031103 Ρ US 2004-611292P 20040921 WO 2004-IB3535 W 20041026 OTHER SOURCE(S): CASREACT 142:430293; MARPAT 142:430293

GΙ

IT

$$(R^4)_n$$
 $N$ 
 $R^2$ 
 $R^2$ 

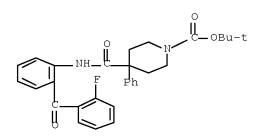
Title compds. I [R1 = alkyl, cycloalkyl, alkoxy, etc.; R2 = alkyl, cycloalkyl, AΒ amino, etc.; R3 = H, (cyclo)alkyl, etc.; R4 = H, halo, NO2, etc.] are prepared For instance, 2-(4-methylpiperazin-1-yl)-4- phenylquinazoline (II) is prepared in 3 steps from 2-aminobenzophenone, urea and 1-methylpiperazine. II has Ki = 29.7 nM for the norepinephrine transporter receptor. I are useful for the treatment of central nervous system disorders.

939374-02-4P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of quinazolinyl norepinephrine reuptake inhibitors for treatment of central nervous system disorders)

RN 939374-02-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[2-(2-fluorobenzoyl)phenyl]amino]carbonyl ]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)



ANSWER 28 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:303504 CAPLUS Full-text

DOCUMENT NUMBER: 142:355172

TITLE: Preparation of pyridinyl ureas as urotensin II

antagonists

INVENTOR(S): Mathys, Boris; Mueller, Claus; Scherz, Michael;

Weller, Thomas; Clozel, Martine; Velker, Joerg; Bur,

Daniel

PATENT ASSIGNEE(S): Actelion Pharmaceuticals Ltd., Switz.

SOURCE: PCT Int. Appl., 113 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

		FENT										LICAT					ATE	
												2004-1					0040	921
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	ВВ	, BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DΖ	, EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	, JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG	, MK,	MN,	MW,	MX,	MZ,	NA,	NI,
			NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU	, SC,	SD,	SE,	SG,	SK,	SL,	SY,
			ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US	, UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
		RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD	, SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
			ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT	, BE,	BG,	CH,	CY,	CZ,	DE,	DK,
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			SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM	, GA,	GN,	GQ,	GW,	ML,	MR,	NE,
			SN,	TD,	TG													
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		2540						2005	0407		CA	2004-	2540	196		2	0040	921
	EP	1670	470			A1		2006	0621		ΕP	2004-	7654	36		2	0040	921
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO,	CY,	TR,	ВG	, CZ,	EE,	HU,	PL,	SK,	HR	
		1856										2004-						
	BR	2004	0147	77		Α		2006	1121		BR	2004-	1477	7		2	0040	921
	JΡ	2007	5066	92		${ m T}$		2007	0322		JΡ	2006-	5273	32		2	0040	921
	MX	2006	PA03	264		Α		2006	0608		MX	2006-1	PA32	64		2	0060	323
	KR	2007	0141	8 0		Α		2007	0131		KR	2006-	7058	48		2	0060	324
		2006				Α			0622			2006-					0060	
	US	2007	0043	081		A1		2007	0222		US	2006-	5735	16		2	0060	327
	ΙN	2006	CN01	415		Α		2007	0622			2006-0						
PRIC	RIT	Y APP	LN.	INFO	.:						WO	2003-1	EP10	746		A 2	0030	926
											WO	2004-1	EP10	559	,	W 2	0040	921
OTHE	R S	DURCE	(S):			CAS:	REAC	T 14	2:35	5172	; M	ARPAT	142	:355	172			

Title compds. I [wherein Py = pyridin-4-yl disubstituted in positions 2 and 6; AΒ X = aryl, arylalkyl, aryloxy, etc.; A = (CH2)n; XCZ form an exocyclic bond which bears an Ar group and the just formed CH2 group; Z = H; when X = aryl or arylalkyl, Z = H, OH, CO2H, etc.; when X = aryl, arylakyl and n = 0, Z = H, OH, CO2H, aryl, etc.; Y = CR6R7(CH2)m, (CH2)mCR6R7; m = 1-2; n = 0-1; R6 = H, alkyl, aryl, arylalkyl; or R6CR7 = carbocycle; R7 = H, Me; and their enantiomers, diastereomers, racemates, pharmaceutically acceptable salts, solvate complexes, and morphol. forms thereof] were prepared as neurohormonal antagonists. For example, reacting 2-(4-benzylpiperidino)-1-ethanamine with 1,3-Bis(2,6-dimethylpyridin-4-yl)urea gave II. In binding assays of human[125I]-urotensin II to human-derived TE-671 rhabdomyosarcoma cells, compds. of the invention showed activity with IC50 values ranging from 0.1 nM to 1000 nM. Thus, I and their pharmaceutical compns., optionally comprising other pharmacol. active compds., are useful for treating a variety of disorders associated with dysregulation of urotensin II, such as heart disease, hypertension, kidney disease, diabetes, asthma, and pulmonary disease (no data).

IT 849226-28-2P, 4-(N-Benzyl-N-methylcarbamoyl)-4-phenylpiperidine-1-carboxylic acid benzyl ester

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of novel 2-piperidinoethyl quinolinyl ureas for use as urotensin II antagonists in combination with other pharmacol. active compds.)

RN 849226-26-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[methyl(phenylmethyl)amino]carbonyl]-4-phenyl-, phenylmethyl ester (CA INDEX NAME)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 29 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:284138 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 142:355256

TITLE: Preparation of tricyclic-substituted piperidinols and

analogs as chemokine receptor antagonists

INVENTOR(S): Luly, Jay R.; Nakasato, Yoshisuke; Ohshima, Etsuo;

Harriman, Geraldine C. B.; Carson, Kenneth G.; Ghosh,

Shomir; Elder, Amy M.; Mattia, Karen M.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 194 pp., Cont.-in-part of U.S.

Ser. No. 989,086.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

## PATENT INFORMATION:

	CENT										PLICA:					ATE	
	2005						2005				2004-					0041	007
US	7271	176			В2		2007	0918									
US	6613	905			В1		2003	0902		US	1998-	-1488	23		1	9980	904
US	6329	385			В1		2001	1211		US	1999-	-2351	02		1	9990	121
US	2002	0119	973		A1		2002	0829		US	1999-	-3628	37		1	9990	728
US	6509	346			В2		2003	0121									
US	2002	0169	155		A1		2002	1114		US	2001-	-9890	86		2	0011	121
WO	2003	0459	42		A2		2003	0605		WO	2002-	-US36	953		2	0021	113
WO	2003	0459	42		А3		2003	0912									
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		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	ΕC	C, EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
	GM, HR, F LS, LT, I					IL,	IN,	IS,	JP,	KE	E, KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
	LS, LT, 1					•											
	PL, PT, F					SC,	SD,	SE,	SG,	SI	, SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZP	A, ZM,	ZW					
	RW:										Z, TZ,						
											G, CH,						
			•				•		•		, PT,	•	•		BF,	ВJ,	CF,
			•								R, NE,		•				
US	2007	0060	592		A1		2007	0315		US	2006-	-5956	53		2	0061	110
							2007	0208			2007-						
PRIORITY	Y APP	LN.	INFO	.:							1998-						
											1999-						
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											2002-					0021	
											1998-						
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OTHER SOURCE(S): MARPAT 142:355256

GI

Therapeutically effective compds. I [Z = (un)substituted heterocyclic ring fused to one or more carbocyclic aromatic rings; n = 1-4; M = NR2, CR1R2; R1 = H, OH, N3, etc.; R2 = OH, halo, acyl, aryl, etc.; R70, R71 = H, OH, N3, etc.; R72, R73 = O, N2, halo, etc.] and II [Z, n are defined as above; R2 = OH, halo, acyl, aryl, etc.] were prepared for treatment of diseases associated with aberrant leukocyte recruitment and/or activation (no data). I and II displayed chemokine binding activities with IC50 values ranging from < 1  $\mu$ M to < 1000  $\mu$ M. Thus, the [([1]benzoxepino[2,3-b]pyridinylidene)propyl]piperidinol III was prepared in three steps by reaction of 5,11-dihydro-7-methoxy[1]benzoxepino[2,3-b]pyridin-5-one with cyclopropylmagnesium bromide in THF, followed by ring cleavage-dehydration-

reaction of 5,11-dihydro-7-methoxy[1]benzoxepino[2,3-b]pyridin-5-one with cyclopropylmagnesium bromide in THF, followed by ring cleavage-dehydration-bromination with HBr, and addition of 4-(4-chlorophenyl)-4-hydroxypiperidine to the bromide in DMF. Major and minor isomers were separated The pharmaceutical compns. comprising the compound I or II is disclosed.

IT 849106-03-2P, 4-Carbamoyl-4-(4-chlorophenyl)piperidine-1-carboxylic acid tert-butyl ester

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tricyclic piperidinols and pyrrolidines as chemokine receptor antagonists for treatment of diseases associated with aberrant leukocyte recruitment and activation)

RN 849106-03-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminocarbonyl)-4-(4-chlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

REFERENCE COUNT: 151 THERE ARE 151 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L3 ANSWER 30 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:220128 CAPLUS Full-text

DOCUMENT NUMBER: 142:298111

TITLE: Preparation of 2-substituted benzimidazole piperidines

as selective melanin concentrating hormone receptor antagonists for the treatment of obesity and related

disorders

INVENTOR(S): Burnett, Duane A.; Wu, Wen-Lian; Sasikumar,

Thavalakulamgara K.; Greenlee, William J.; Caplen,

Mary Ann; Guo, Tao; Hunter, Rachael Catherine

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 57 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	TENT				KINI								NO.			ATE		
	2005															0040	826	
CA	2536	929			A1		2005	0317		CA 2	004-	2536	929		2	0040	826	
WO	2005	0237	98		A1		2005	0317		WO 2	004-	US27	734		2	0040	826	
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
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		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
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	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	
		SN,	TD,	TG														
EP	1664	022			A1		2006	0607		EP 2	004-	7822	52		2	0040	826	
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		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,	HR
CN	1845	916			Α		2006	1011		CN 2	004-	8002	4937		2	0040	826	
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MX	2006	PA02	372		Α		2006	0620		MX 2	006-	PA23	72		2	0060	228	
PRIORIT	Y APP	LN.	INFO	.:						US 2	003-	4988	76P		P 2	0030	829	
										WO 2	004-	US27	734		W 2	0040	826	
OTHER S	OURCE	(S):			CASI	REAC	T 14	2:29	8111	; MA	RPAT	142	:298	111				

Ι

GΙ

AB Title compds. I [Y = bond, divalent alkyl, etc.; M = 0-1; n = 0, 2, 3; Ar = (hetero)aryl, R1 = H, alkyl, cycloalkyl, etc.; R4 = OH, alkoxy, etc.] are prepared For instance, II is prepared in 9 steps from 4-aminomethyl-1-benzyl-4-phenylpiperidine, 4,5-difluorobenzene-1,2-diamine and 3-cyanobenzeneboronic acid. In a selected example, a Ki of 3 nM for the melanin concentrating hormone (MCH) receptor is observed I are useful in treating obesity, metabolic disorders, eating disorders, e.g., hyperphagia and diabetes.

ΙI

IT 847614-74-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2-substituted benzimidazole piperidines as selective melanin concentrating hormone receptor antagonists for treatment of obesity and related disorders)

RN 847614-74-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(3'-cyano[1,1'-biphenyl]-4-yl)-4-[[(5,6-difluoro-1H-benzimidazol-2-yl)amino]methyl]-, methyl ester (CA INDEX NAME)

IT 847615-45-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of 2-substituted benzimidazole piperidines as selective melanin concentrating hormone receptor antagonists for treatment of obesity and related disorders)

RN 847615-45-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-bromophenyl)-4-[[(5,6-difluoro-1H-benzimidazol-2-yl)amino]methyl]-, methyl ester (CA INDEX NAME)

IT 847614-99-7P 847615-00-3P 847615-01-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 2-substituted benzimidazole piperidines as selective melanin concentrating hormone receptor antagonists for treatment of obesity and related disorders)

RN 847614-99-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[(2,2,2-trifluoroacetyl)amino]methyl]-, methyl ester (CA INDEX NAME)

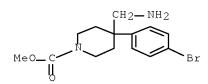
RN 847615-00-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-bromophenyl)-4-[[(2,2,2-trifluoroacetyl)amino]methyl]-, methyl ester (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ \text{MeO-C} & & \\ & & & \\ & & & \\ \end{array}$$

RN 847615-01-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-bromophenyl)-, methyl ester (CA INDEX NAME)



L3 ANSWER 31 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1067791 CAPLUS Full-text

DOCUMENT NUMBER: 142:198338

TITLE: The Effects of Conformational Constraints and Steric

Bulk in the Amino Acid Moiety of Philanthotoxins on

AMPAR Antagonism

AUTHOR(S): Jorgensen, Malene R.; Olsen, Christian A.; Mellor, Ian

R.; Usherwood, Peter N. R.; Witt, Matthias; Franzyk,

Henrik; Jaroszewski, Jerzy W.

CORPORATE SOURCE: Department of Medicinal Chemistry, The Danish

University of Pharmaceutical Sciences, Copenhagen,

DK-2100, Den.

SOURCE: Journal of Medicinal Chemistry (2005), 48(1), 56-70

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:198338

AΒ Philanthotoxin-343 (PhTX-343), a synthetic analog of wasp toxin PhTX-433, is a noncompetitive antagonist at ionotropic receptors (e.g., AChR or iGluR). To determine possible effects of variations of the amino acid side chain, a library consisting of seventeen PhTX-343 analogs was prepared Thus, tyrosine was replaced by either apolar, conformationally constrained, or bulky amino acids, whereas the acyl unit and the polyamine moiety were kept unchanged. Analogs with tertiary amide groups were also prepared Pentafluorophenyl esters were employed for amide bond formation, establishing general protocols for philanthotoxin solution- and solid-phase synthesis (39-90% and 42-54% overall yields, resp.). The analogs were tested for their ability to antagonize kainate-induced currents of 2-amino-3-(3-hydroxy-5-methyl-4isoxazolyl)propanoic acid receptors (AMPAR) expressed in Xenopus oocytes from rat brain mRNA. This showed that steric bulk in the amino acid moiety is well tolerated and suggests that binding to AMPAR does not involve the lpha-NHCO group as a donor in hydrogen bonding.

IT 839720-16-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(effects of conformational constraints and steric bulk in the amino acid moiety of philanthotoxin analogs on AMPAR antagonism)

RN 839720-16-0 CAPLUS

CN 4-Piperidinecarboxamide, N-[3-[[4-[(3-aminopropyl)amino]butyl]amino]propyl ]-1-(1-oxobutyl)-4-phenyl-, 2,2,2-trifluoroacetate (1:3) (CA INDEX NAME)

CM 1

CRN 839720-15-9 CMF C26 H45 N5 O2

CM 2

CRN 76-05-1 CMF C2 H F3 O2

IT 839720-44-4P 839720-46-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(effects of conformational constraints and steric bulk in the amino acid moiety of philanthotoxin analogs on AMPAR antagonism)

RN 839720-44-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[6,11-bis[(1,1-dimethylethoxy)carbonyl]18,18-dimethyl-1,16-dioxo-17-oxa-2,6,11,15-tetraazanonadec-1-yl]-4-phenyl, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

RN 839720-46-6 CAPLUS

CN 2,6,11,15-Tetraazahexadecanoic acid, 6,11-bis[(1,1-dimethylethoxy)carbonyl]-16-oxo-16-[1-(1-oxobutyl)-4-phenyl-4-piperidinyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 32 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:872662 CAPLUS Full-text

DOCUMENT NUMBER: 141:366128

TITLE: Preparation of cycloalkylcarbonyl or

heterocycloalkylcarbonyl-substituted spiropiperidines as melanocortin-4 receptor agonists for the treatment

of conditions such as obesity

INVENTOR(S): Guo, Liangqin; He, Shuwen; Jian, Tianying; Lai,

Yingjie; Liu, Jian; Nargund, Ravi P.; Sebhat, Iyassu K.; Ujjainwalla, Feroze; Ye, Zhixiong; Young, Jonathan

R.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 200 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

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PAT	TENT :	NO.			KIN	D	DATE			APP	LICAT	ION	NO.		]	DATE	
WO	2004	0893	07		A2	_	2004	1021		WO	2004-	 US97	 51		:	20040	331
WO	2004	0893	07		А3		2005	0331									
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	EC,	EE,	EG,	ES,	FΙ	, GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	, JP,	KΕ,	KG,	KP,	KR	, KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG	, MK,	MN,	MW,	MX,	MZ	, NA,	ΝΙ,
		NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU	, SC,	SD,	SE,	SG,	SK	, SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US	, UZ,	VC,	VN,	YU,	ZA	, ZM,	ZW
	RW:										, SZ,						
											BG,						
		ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU	, MC,	NL,	PL,	PT,	RO	, SE,	SI,
		SK,	TR,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GΑ	, GN,	GQ,	GW,	ML,	MR	, NE,	SN,
		TD,	ΤG														
AU	2004	2278.	35		A1		2004	1021		AU	2004-	2278	35		:	20040	331
AU	2004	2278.	35		В2		2007										
	2520				A1		2004	1021		CA	2004-	2520	114		:	20040	331
EP	1613				A2						2004-					20040	
	R:						•				I, IT,		•				•
		•	•				•				, TR,		•	•			
	2004										2004-						
	1768				А						2004-						
	2006						2006			JP	2006-	5094	89			20040	331
	3856				В2		2006										
	1011				А		2008				2007-					20040	
	2006		904		A1		2006			US	2005-	5483	50			20050	907
	7329				В2		2008										
	2005				А		2006			ZA	2005-	7638				20050	
	2005				A		2007			IN	2005-	DN42	99			20050	
	2005				A		2005			MX	2005-	PA10	724			20051	
	2005				А		2005	1230			2005-					20051	
PRIORITY	Y APP	LN.	INFO	.:							2003-						
											2004-						
OFFIED 24		, a ,					1 41	0.000		WO	2004-	US97	51		W :	20040	33I
OTHER SO	JURCE	(S):			MAR.	PAI	141:	3661	∠8								

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AΒ Title compds. I or II [X,Y = R62C, R9N, C(:0); Y,X = R62C, R6N, C(:0), R6N:C,O, S, S(:O), SO2; XY = CR6:CR6; Z = R1C, N; A = (CH2)m; E = (CH2)p; R1 = H, amidino, (un) substituted aminoalkyl, iminoylalkyl, alkyl, cycloalkylalkyl, phenylalkyl, naphthylalkyl, or heteroarylalkyl; R2 = (un)substituted Ph, naphthyl, heteroaryl; R4 = H, (un)substituted alkyl, halogen, alkoxy, O2N, F3C, F3CCH2, F3CO, F3CCH2O; R6, R9 = H, (un)substituted alkyl, phenylalkyl, naphthylalkyl, heteroarylalkyl, cycloalkylalkyl, heterocycloalkylalkyl, aminoalkyl, carboxyalkyl, etc.; m , p = 1, 2; n = 0-3] such as III $\bullet$ HCl are prepared as melanocortin-4 receptor agonists for the treatment of obesity and related conditions such as diabetes, bulimia, insulin resistance, and hyperlipidemia; a variety of other conditions, particularly male and female sexual dysfunction and erectile dysfunction, are also potentially treatable with the title compds. Oxoindanospiropiperidinecarboxylate IV is reduced with sodium borohydride and the alc. eliminated in the presence of ptoluenesulfonic acid to give the indenespiropiperidinecarboxylate; Jacobsen

epoxidn. of the indene double bond, opening of the epoxide with sodium azide, aziridine formation using a fluorous phosphine, N-methylation of the aziridine, regioselective reduction of the aziridine with sodium borohydride to yield the aminoindanospiropiperidinecarboxylate, acylation with 2-acetoxyisobutyryl chloride, hydrolysis of the ester with sodium methoxide and methylation of the alc. with Me iodide, deprotection of the piperidine nitrogen, and acylation with nonracemic trans-4-(2,4-difluorophenyl)-1-tert-butyl-3-pyrrolidinecarboxylic acid yields III. Some of the title compds. bind to the melanocortin-4 receptor with IC50 values of <10  $\mu\rm M$  and <5  $\mu\rm M$  (no data). 778627-62-6P 778627-63-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of cycloalkylcarbonyl or

heterocycloalkylcarbonyl-

substituted spiropiperidines as melanocortin-4 receptor agonists for the treatment of conditions such as obesity and male or female sexual dysfunction)

RN 778627-62-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-chloro-3-methylphenyl)-, ethyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{C1} \\ \end{array}$$

RN 778627-63-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-chloro-3-methylphenyl)-4[[(methylsulfonyl)amino]methyl]-, ethyl ester (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ \text{Me} & & & & \\ \text{C1} & & & \text{CH}_2-\text{NH}-\text{S-Me} \\ \end{array}$$

L3 ANSWER 33 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:610028 CAPLUS Full-text

DOCUMENT NUMBER: 141:150947

TITLE: Affinity fishing for ligands and protein receptors by

an efficient process involving protein mixtures and

ligand libraries

INVENTOR(S): St. Hilaire, Phaedria Marie; Yin, Haifeng; Surve,

Sheryl; Wenckens, Martin

PATENT ASSIGNEE(S): Carlsberg A/S, Den.

SOURCE: PCT Int. Appl., 172 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

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APPLICATION NO.
    PATENT NO. KIND DATE
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    WO 2004062553 A2 20040729 WO 2004-DK23
WO 2004062553 A3 20050127
                                                                  20040116
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ
    US 20040142379 A1 20040722 US 2003-346737 20030116
    AU 2004204276
                        A1
                               20040729 AU 2004-204276
                                                                  20040116
    CA 2551593
EP 1588173
                        A1 20040729 CA 2004-2551593
A2 20051026 EP 2004-702645
                                                                  20040116
                                                                   20040116
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     US 20060257875 A1 20061116 US 2005-541501 20050707
TN 2005CN01903 A 20070914 TN 2005-CN1903 20050811
                                                                   20050811
     IN 2005CN01903
                        A
                                20070914 IN 2005-CN1903
                                            IN 2005-CN1903 20050811
US 2003-346737 A 20030116
PRIORITY APPLN. INFO.:
                                            DK 2003-749 A 20030519
WO 2004-DK23 W 20040116
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AB The invention provides putative "drugable" protein targets and actively binding ligands identified in an efficient and reproducible process by determining the affinity of protein mixts. to libraries of ligand compds. of defined size and composition The libraries are used to isolate and identify previously unknown corresponding protein-ligand binding pairs from a mixture of proteins and a library of compds., and are particularly useful to identify differentially selective protein-ligand binding pairs, for example, representing a single physiol. state or several varied but related states, such as disease vs. normal conditions. The invention also provides processes for identifying such protein-ligand binding pairs.

IT 724785-44-8P 724785-46-0P

RL: BSU (Biological study, unclassified); CPN (Combinatorial preparation); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)

(affinity fishing for ligands and protein receptors by an efficient process involving protein mixts. and ligand libraries)

RN 724785-44-8 CAPLUS

CN 4-Piperidinecarboxylic acid, 1-[(2S)-2-[[2-[(3S)-3-[[[1-[[(2S,4S)-1-[(2S)-2-amino-1-oxo-3-(3-pyridinyl)propyl]-4-[[bis[[(1,1-dimethylethoxy)carbonyl]amino]methylene]amino]-2-pyrrolidinyl]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]hexahydro-2-oxo-1H-azepin-1-yl]acetyl]amino]-1-oxo-3-phenylpropyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 724785-46-0 CAPLUS

CN L-Histidine, L-phenylalanyl-L-threonyl-3-(3-pyridinyl)-L-alanyl-4-phenyl-4-piperidinecarbonyl-L- $\alpha$ -aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L3 ANSWER 34 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:589139 CAPLUS Full-text

DOCUMENT NUMBER: 141:140767

TITLE: Affinity fishing for ligands and protein receptors INVENTOR(S): St. Hilaire, Phaedria Marie; Yin, Haifeng; Surve,

Sheryl

PATENT ASSIGNEE(S): Carlsberg Research Laboratory, Den.

SOURCE: U.S. Pat. Appl. Publ., 55 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PAT	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
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	CA	2551	593			A1		2004	0729		CA 2	004-	2551	593		2	0040	116
	WO	2004	0625	53		A2		2004	0729		WO 2	004-	DK23			2	0040	116
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			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ		
	ΕP	1588	173			A2		2005	1026		EP 2	004-	7026	45		2	0040	116
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			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	ВG,	CZ,	EE,	HU,	SK	
	US	2006	0257	875		A1		2006	1116		US 2	005-	5415	01		2	0050	707
	ΙN	2005	CN01	903		Α		2007	0914		IN 2	005-	CN19	03		2	0050	811
PRIO	RIT	APP	LN.	INFO	.:						US 2	003-	3467	37		A 2	0030	116
											DK 2	003-	749			A 2	0030	519
											WO 2	004-	DK23		1	W 2	0040	116

AB The invention provides a process for identifying specific members of a previously unknown protein-ligand binding pair which comprises the steps of (a) synthesizing a ligand library onto resin beads to form an immobilized ligand library, (b) incubating the immobilized ligand library with one or more protein mixts., (c) detecting an immobilized ligand-protein binding pair from the incubation mixture, and (d) identifying the ligand and the protein of the ligand-binding pair. The identified ligand and protein are specific members of a previously unknown ligand-protein binding pair, which, e.g., represent a single physiol. state or several varied but related states, such as disease vs. normal conditions. Thus, a peptide library which contains a photolabile linker and a spacer was used in solid-phase screening of labeled myocyte proteins.

IT 724785-44-8P 724785-46-0P

RL: ANT (Analyte); DGN (Diagnostic use); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

(affinity fishing for ligands and proteins receptors)

RN 724785-44-8 CAPLUS

CN 4-Piperidinecarboxylic acid, 1-[(2S)-2-[[2-[(3S)-3-[[[1-[[(2S,4S)-1-[(2S)-2-amino-1-oxo-3-(3-pyridinyl)propyl]-4-[[bis[[(1,1-dimethylethoxy)carbonyl]amino]methylene]amino]-2-pyrrolidinyl]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]hexahydro-2-oxo-1H-azepin-1-yl]acetyl]amino]-1-oxo-3-phenylpropyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 724785-46-0 CAPLUS

CN L-Histidine, L-phenylalanyl-L-threonyl-3-(3-pyridinyl)-L-alanyl-4-phenyl-4-piperidinecarbonyl-L- $\alpha$ -aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L3 ANSWER 35 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:550937 CAPLUS Full-text

DOCUMENT NUMBER: 141:106379

TITLE: A preparation of (piperidinylmethyl)amine derivatives,

useful as NK1 antagonists and selective serotonin

reuptake inhibitors (SSRI)

INVENTOR(S): Bernstein, Peter; Warwick, Paul

PATENT ASSIGNEE(S): Astrazeneca AB, Swed. SOURCE: PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	NO.			KIN		DATE					ION 1			D.	ATE		
WO	2004	0567	71				2004	0708							2	0031	218	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	
							PT,											
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	
		BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
		ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG
AU	2003	2915	89		A1		2004	0714		AU 2	003-	2915	89		2	0031	218	
EP	1581	495			A1		2005	1005		EP 2	003-	7684	68		2	0031	218	
EP	1581	495			В1		2007	0418										
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		
JP	2006	5123	63		Τ		2006	0413		JP 2	004-	5622	05		2	0031	218	
AT	3600	01			Τ		2007	0515	,	AT 2	003-	7684	68		2	0031	218	
ES	2286	470			Т3		2007	1201		ES 2	003-	7684	68		2	0031	218	
US	2006	0058	352		A1		2006	0316		US 2	005-	5391	40		2	0050	616	
PRIORIT	Y APP	LN.	INFO	.:						US 2	002-	4351	30P		P 2	0021	220	
										WO 2	003-	SE20	04	1	W 2	0031	218	
THER S	OLIBCE	(8) .			MZDI	РΔТ	141.	1063	79									

OTHER SOURCE(S): MARPAT 141:106379

GΙ

The invention relates to a preparation of piperidinylamine derivs. of formula I [wherein: R1 and R2 are independently selected from H, CN, CF3, OCF3, halogen, or alk(en/yn)yl, etc.; R3 is H or alkyl; R4 is H, CN, alkyl, or alkoxy; R5 is H or alkyl; Ar is (un)substituted Ph], useful as NK1 antagonists and selective serotonin reuptake inhibitors (SSRI). The prepared invention compds. were screened in SERT binding assay (2nM < Ki < 180nM) and NK1 FLIPR assay (70nM < IC50 < 2 $\mu$ M). For instance, piperidine derivative II was prepared via amination of 1-iodomethyl-3- cyanonaphthalene by piperidine derivative III with a yield of 51% (example 1).

IT 669068-09-1P 669068-74-0P 719276-18-3P 719276-23-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of piperidinylamine derivs. with NK1 antagonist activity and SSRI activity)

RN 669068-09-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(3,4-dichlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c|c} C1 & H_2N-CH_2 \\ \hline \\ C1 & C \\ \end{array}$$

RN 669068-74-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 719276-18-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-1-naphthalenyl)methyl]amino]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 719276-23-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-1-naphthalenyl)methyl]methylami no]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

IT 719276-01-4P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (preparation of piperidinylamine derivs. with NK1 antagonist activity and

RN 719276-01-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-1-naphthalenyl)methyl]amino]methyl]-4-(3,4-dichlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

IT 719276-25-2 719276-27-4

RL: RCT (Reactant); RACT (Reactant or reagent) (reactant; preparation of piperidinylamine derivs. with NK1 antagonist activity and SSRI activity)

RN 719276-25-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-2-methoxy-1-naphthalenyl)methyl]amino]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethylester (CA INDEX NAME)

RN 719276-27-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-2-ethyl-1-naphthalenyl)methyl]amino]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethylester (CA INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 36 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:252507 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 140:287409

TITLE: Preparation of carbamoylpiperazines as melanocortin-4

receptor agonists

INVENTOR(S): Bakshi, Raman Kumar; Nargund, Ravi P.; Palucki, Brenda

L.; Park, Min K.; Ye, Zhixiong

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 154 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ΓΕΝΤ	NO.			KINI	)	DATE			APPI	ICAT	ION 1	NO.		D.	ATE	
WO	2004	0247	20		A1	_	2004	0325		 WO 2	003-	 US27	 892		2	0030	905
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KR,	KΖ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NΖ,	OM,	PG,
		PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	TM,	TN,	TR,
		TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW				
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	ΗU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	$\mathrm{ML}_{m{\prime}}$	MR,	ΝE,	SN,	TD,	TG
CA	2498	272			A1		2004	0325		CA 2	003-	2498.	272		2	0030	905
ΑU	2003	2684	93		A1		2004	0430		AU 2	003-	2684	93		2	0030	905
EP	1539	735			A1		2005	0615		EP 2	003-	7494	59		2	0030	905
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
JP	2006	5055	31		Τ		2006	0216		JP 2	004-	5361	16		2	0030	905
US	2006	0040	906		A1		2006	0223		US 2	005-	5261	78		2	0050	228
RIT	Y APP	LN.	INFO	.:							002-						
										WO 2	003-	US27	892	1	W 2	0030	905
D CC	TIDCE	191.			MADI	フカエ	1/10 •	22741	na								

OTHER SOURCE(S): MARPAT 140:287409

GΙ

$$\begin{array}{c} \begin{array}{c} \begin{array}{c} \text{NR2} \\ \text{NR2} \end{array} \end{array}$$

Piperazines I [R1 = H, (un)substituted alkyl, cycloalkyl, aryl, heteroaryl; R2 = H, (un)substituted alkyl, aryl, cycloalkyl, heterocyclyl, heteroaryl, CH2C.tplbond.CH, CH2CHF2; R3-R10 = H, (un)substituted alkyl, aryl, cycloalkyl, heterocyclyl, heteroaryl; R3R5, R3R9, R5R7, R7R9 = atoms required to complete a 5-7-membered ring; X = (un)substituted alkyl, cycloalkyl, aryl, heteroaryl, heterocyclyl, CN, CONH2, CO2H, acyl, NH2, SH, s(O)H, SO2H, OH; Y = H, (un)substituted alkyl, alkenyl, cycloalkyl, aryl, heteroaryl, heterocyclyl; m = 1, 2] were prepared for use as agonists of the human melanocortin-4 receptor (MC-4R) and, in particular, as receptor-subtype selective agonists of MC-4R. They are useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity and diabetes. Thus, (R)-4-FC6H4CH2CH(CO2H)NHCO2CMe3 was treated with 1-cyclohexyl-4-tert.-butoxycarbamoylpiperidine hydrochloride, followed by deblocking and reaction with cis-2,6-dimethylpiperazine to give the title compound II.

TT

IT 674791-00-5P 674792-92-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of carbamoylpiperazines as melanocortin-4 receptor agonists) 674791-00-5 CAPLUS

CN 1-Piperazinecarboxamide, N-[(1R)-2-[4-[[bis(1-methylethyl)amino]carbonyl]-4-phenyl-1-piperidinyl]-1-[(4-fluorophenyl)methyl]-2-oxoethyl]-3,5-dimethyl-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

RN

RN 674792-92-8 CAPLUS

CN 1-Piperazinecarboxamide, N-[(1R)-2-[4-[[bis(1-methylethyl)amino]carbonyl]-4-phenyl-1-piperidinyl]-1-[(4-fluorophenyl)methyl]-2-oxoethyl]-3,5-dimethyl- (CA INDEX NAME)

Absolute stereochemistry.

IT 674791-72-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of carbamoylpiperazines as melanocortin-4 receptor agonists)

RN 674791-72-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[bis(1-methylethyl)amino]carbonyl]-4-phenyl-, phenylmethyl ester (CA INDEX NAME)

L3 ANSWER 37 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:203811 CAPLUS  $\underline{\text{Full-text}}$ 

DOCUMENT NUMBER: 140:253448

TITLE: Preparation of N-piperidinylmethyl naphthamide

derivatives as NK1 receptor antagonists and serotonin

reuptake inhibitors and their therapeutic uses

INVENTOR(S): Bernstein, Peter; Dantzman, Cathy; Dedinas, Robert;

Shen, Lihong; Warwick, Paul

PATENT ASSIGNEE(S): Astrazeneca AB, Swed. SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	NO.			KIN:	D	DATE			APP	LICAT	ION 1	NO.		D	ATE	
WO	2004	0204	11		A1		2004	0311		WO	2003-	SE13.	29		2	0030	826
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB	, BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	, KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN	, MW,	MX,	MΖ,	NI,	NO,	NΖ,	OM,
		PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE	, SG,	SK,	SL,	SY,	ΤJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN	, YU,	ZA,	ZM,	ZW			
	RW:	GH,	GM,	ΚE,	LS,	MW,	MΖ,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	ВG	, CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FΙ,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC	, NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ	, GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG
AU	2003	2535	58		A1		2004	0319		AU	2003-	2535	58		2	0030	826
EP	1549	615			A1		2005	0706		ΕP	2003-	7915.	29		2	0030	826
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TR,	BG,	CZ,	EE,	HU,	SK	
JP	2006	5022	39		Τ		2006	0119		JP	2004-	5697	44		2	0030	826
US	2006	0241	142		A1		2006	1026		US	2005-	5253	03		2	0051	104
PRIORIT	Y APP	LN.	INFO	.:						SE	2002-	2567			A 2	0020	829
										SE	2002-	2986			A 2	0021	009
										WO	2003-	SE13	29	1	W 2	0030	826
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OTHER SOURCE(S): MARPAT 140:253448

GI

$$R^3$$
 $R^4$ 
 $R^2$ 
 $R^2$ 

AΒ N-piperidinylmethyl naphthamide derivs. (shown as I; variables defined below; e.g. II as monocitrate hemihydrate), in vivo-hydrolyzable precursors thereof, pharmaceutically-acceptable salts thereof, the use in therapy and pharmaceutical compns. and methods of treatment using the same are disclosed. For I: R1 = CN, CF3, OCF3, OCHF2, halogen, C2-4alkenyl, C2-4alkynyl, Ra, Rb, SRa, NRaRb, CH2NRaRb, ORa or CH2ORa, where Ra and Rb = H, C1-6-alkyl, C(O)Rc, C(0) NHRc or CO2Rc, where Rc = C1-6 alkyl; or, Ra and Rb together are (CH2) jG(CH2) k or G(CH2) jG, where G is O or S, j = 1-4, and k = 0-2; m = 1-3where at least one R1 moiety is other than H; R2 and R3 = H, C1-6alkyl or C1-6alkyl substituted with C1-4alkoxy; R4 = H, CN, CF3, OCF3, OCHF2, halogen, C1-4alkyl, C2-4alkenyl, C2-4alkynyl, SRa, NRaRb, CH2NRaRb, ORa or CH2ORa, where Ra and Rb = H, C1-6alkyl, C(0)Rc, C(0)NHRc or CO2Rc where Rc = C1-6alkyl; or, Ra and Rb together are (CH2)jG(CH2)k or G(CH2)jG, and n is 0-3. Although the methods of preparation are not claimed, .apprx.80 example prepns. are included. For example, II was prepared from 3-cyano-1-naphthoyl chloride and 1-methyl-4-(3,4-dichlorophenyl)-4-(N-methylaminomethyl) piperidine; the 2nd reactant was prepared in 4 steps starting with cyclization of 3,4dichlorophenylacetonitrile with N-methylbis(2-chloroethyl)amine hydrochloride to give 1-methyl-4-(3,4- dichlorophenyl)-4-cyanopiperidine, which was hydrogenated to 1-methyl-4-aminomethyl-4-(3,4-dichlorophenyl)piperidine, which was ethoxycarbonylated to 1-methyl-4-(3,4-dichlorophenyl)-4-(ethoxycarbonylaminomethyl)piperidine, which was reduced with LiAlH4 to 1methyl-4-(3,4-dichlorophenyl)-4-(N-methylaminomethyl)piperidine. Compds. I exhibit a Ki of 1-100 nM in the SERT assay and have an IC50 = 1-100 nM in the NK1 FLIPR assay.

IT 669068-08-0P, 1-Boc-4-(3,4-dichlorophenyl)-4-[[[(3-cyano-2-methoxynaphth-1-yl)carbonyl]amino]methyl]piperidine 669068-09-1P, 1-Boc-4-aminomethyl-4-(3,4-dichlorophenyl)piperidine 669068-15-9P, 1-Boc-4-(4-chlorophenyl)-4-[[(3-cyano-2-methoxynaphth-1-yl)carbonyl]amino]methyl]piperidine 669068-16-0P, 1-Boc-4-aminomethyl-4-(4-chlorophenyl)piperidine 669068-23-9P, 1-Boc-4-(3,4-dichlorophenyl)-4-[[(3-cyano-2,4-dimethoxynaphth-1-yl)carbonyl]amino]methyl]piperidine 669068-27-3P, 1-Boc-4-(3,4-dichlorophenyl)-4-[[(3-cyano-2-ethylnaphth-1-yl)carbonyl]amino]methyl]piperidine 669068-73-9P, 1-Boc-4-(4-fluorophenyl)-4-[[(3-cyanonaphth-1-yl)carbonyl]amino]methyl]piperidine 669068-74-0P, 1-Boc-4-aminomethyl-4-(4-fluorophenyl)piperidine 669068-77-3P,

RN 669068-09-1 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(3,4-dichlorophenyl)-,
1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c|c} C1 & H_2N-CH_2 \\ \hline \\ C1 & C-OBu-t \\ \hline \end{array}$$

RN 669068-15-9 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-(4-chlorophenyl)-4-[[[(3-cyano-2-methoxy-1-naphthalenyl)carbonyl]amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-16-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-chlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-23-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-2,4-dimethoxy-1-naphthalenyl)carbonyl]amino]methyl]-4-(3,4-dichlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-27-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-2-ethyl-1-naphthalenyl)carbonyl]amino]methyl]-4-(3,4-dichlorophenyl)-,

1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-73-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-1-naphthalenyl)carbonyl]amino]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-74-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 669068-77-3 CAPLUS

 ${\tt CN} \qquad 1-{\tt Piperidine carboxylic acid, 4-[[[(3-{\tt cyano-1-naphthalenyl})carbonyl]methyla}$ 

RN 669068-82-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-cyano-2-ethyl-1-naphthalenyl)carbonyl]amino]methyl]-4-(4-fluorophenyl)-, 1,1-dimethylethylester (CA INDEX NAME)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 38 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:41442 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 140:111281

TITLE: Preparation of substituted piperidines as NK1 receptor

ligands

INVENTOR(S): Alvaro, Giuseppe; Cardullo, Francesca; Di, Fabio

Romano; Giovannini, Riccardo; Piga, Elisabetta;

Tranquillini, Maria Elvira

PATENT ASSIGNEE(S): Glaxo Group Limited, UK; Di Fabio, Romano

SOURCE: PCT Int. Appl., 129 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
	2004 2004						2004 2004			WO 2	003-	 EP71	 27		2	0030	702
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
							MD,										
		PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ΤJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW			
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FΙ,	FR,	GB,	GR,	ΗU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG
AU	2003	2574	33		A1		2004	0123		AU 2	003-	2574	33		2	0030	702
EP	1558	577			A2		2005	0803		EP 2	003-	7626	15		2	0030	702
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	TR,	ВG,	CZ,	EE,	HU,	SK	
JP	2005	5356	50		Τ		2005	1124		JP 2	004-	5186	96		2	0030	702
US	2006	0128	752		A1		2006	0615		US 2	006-	5201	43		2	0060	117
PRIORIT	Y APP	LN.	INFO	.:						GB 2	002-	1539	3		A 2	0020	703
										GB 2	003-	6454			A 2	0030	320
										WO 2	003-	EP71	27	,	W 2	0030	702
OTHER SO	OURCE	(S):			MAR	PAT	140:	1112	81								

- \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT \*
- AB Title compds. I [R = alkyl, cyano, alkoxy, etc.; R1 = H, halo, cycloalkyl, OH, etc.; R2 = H, alkyl; R3-4 = H, CN, alkyl, etc.; R5 = CF3, SOO-2, alkyl, etc.; R6 = H, alkyl; m = 1-4; n = 1-2; p = 0-3; q = 1-3] are prepared For instance, 4-carboxymethyl-4-(4-fluorophenyl)piperidine-1-carboxylic acid tert-Bu ester (preparation given) is coupled to 3,5- (DMF, EDCI, HOBt) and deprotected (CH2Cl2, TFA) to give II. Example compds. inhibit (rat) serotonin transporter with pIC50 in the range of 7.50 5.30. I are useful in the treatment of conditions mediated by tachykinins and/or by selective inhibition of serotonin reuptake transporter protein.
- IT 644981-90-8P, 4-[(3,5-Bis(trifluoromethyl)benzyl)(methyl)carbamoyl ]-4-(4-fluorophenyl)piperidine-1-carboxylic acid tert-butyl ester 644981-95-3P, 4-[(3,5-Bistrifluoromethylbenzyl)(methyl)carbamoyl]-4-(4-chlorophenyl)piperidine-1-carboxylic acid tert-butyl ester 644981-96-4P, 4-[(3,5-Dichlorobenzyl)(methyl)carbamoyl]-4-(4-fluorophenyl)piperidine-1-carboxylic acid tert-butyl ester RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
- (preparation of substituted (homo)piperidines as NK1 receptor ligands) RN 644981-90-8 CAPLUS
- CN 1-Piperidinecarboxylic acid, 4-[[[[3,5-bis(trifluoromethyl)phenyl]methyl]methylamino]carbonyl]-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c|c} \text{CF 3} & \text{Me O} & \text{OBu-t} \\ \text{F}_{3}\text{C} & \text{CH}_{2} & \text{N} & \text{C} & \text{OBu-t} \\ \end{array}$$

RN 644981-95-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[[3,5-bis(trifluoromethyl)phenyl]methyl]methylamino]carbonyl]-4-(4-chlorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c|c} \text{CF}_3 \\ \text{Me} & \text{O} \\ \text{CH}_2 & \text{N} \end{array} \begin{array}{c} \text{OBu-t} \\ \text{Cl} \end{array}$$

RN 644981-96-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3,5-dichlorophenyl)methyl]methylamino]c arbonyl]-4-(4-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$C1 \longrightarrow CH_2 \longrightarrow N \longrightarrow C \longrightarrow N$$

L3 ANSWER 39 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:991507 CAPLUS Full-text

DOCUMENT NUMBER: 140:42206

TITLE: Preparation of piperazinylacylpiperidines as

inhibitors of NGF binding (nerve growth factor) to p75NTR (p75 neurotrophic) receptor for treating p75NTR

related diseases

INVENTOR(S): Bono, Francoise; Bosch, Michaeel; Dos Santos, Victor;

Herbert, Jean Marc; Nisato, Dino; Tonnerre, Bernard;

Wagnon, Jean

PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr. SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA:	TENT :	NO.					DATE			APE	PLIC	AT	ION I				ATE	
WO	2003	1042	 26							WO	200	3-I	TR16				0030	605
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	ΒA,	BE	в, в	ßG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	ΕC	), E	ΞE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	Ξ, Κ	G,	KP,	KR,	KΖ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN	J, M	IW,	MX,	MΖ,	NΙ,	NO,	NZ,	OM,
		PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SC	3, S	K,	SL,	ΤJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZI	A, Z	Μ,	ZW					
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ	Z, T	Z,	UG,	ZM,	ZW,	ΑM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG	3, C	Ή,	CY,	CZ,	DE,	DK,	EE,	ES,
		FΙ,	FR,	GB,	GR,	HU,	IE,	ΙΤ,	LU,	MC	C, N	ΙL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GÇ	Q, G	W,	ML,	MR,	ΝE,	SN,	TD,	ΤG
AU	2003	2556	45		A1		2003	1222		ΑU	200	3-2	2556	45		2	0030	605
EP	1513	836			A1		2005	0316		ΕP	200	3-	7571	09		2	0030	605
EP	1513	836			В1		2006	0503										
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	₹, I	Τ,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑI	, T	'n,	BG,	CZ,	EE,	HU,	SK	
	1675						2005											
	2005																	
AT	3251 3364	22			Τ		2006	0615		ΑT	200	3-	7571	09		2	0030	605
AT	3364																0030	605
PT	1513	836			T		2006										0030	
	2264				Т3		2006	1216		ES	200	3-	7571	09		2	0030	605
	2271						2007	0416										
	2836						2007			TW	200	3-9	9211.	5416		2	0030 0041	606
ZA	2004	0098	23		Α		2006	0726		ZA	200	4 - 9	9823			2	0041	203
US	2006	0167	007		A1		2006	0727		US	200	4-5	5168	8 0		2	0041	203
US	7294	628			В2		2007	1113										
RIORIT	Y APP	LN.	INFO	.:						FR	200	2-	7001			A 2	0020	607
										WO	200	3-I	FR16	86	,	W 2	0030	605
THER SO	OURCE	(S):			MAR	PAT	140:	42206	5									

CE(S):

GI

$$F_3C \xrightarrow{\qquad \qquad \qquad \qquad } N \xrightarrow{\qquad \qquad } CH_2 = N \xrightarrow{\qquad \qquad } N \xrightarrow{\qquad \qquad } II$$

AΒ Title compds. I [wherein: Y = (CH2)n; n = 1 or 2; R1 = halo, CF3, alkyl, alkoxy, trifluoromethoxy; R2 = H, halo; R3 = H, OR5, CH2OR5, NH2 and derivs., NHCOR6 and derivs., NHCONH2 and derivs., CH2NR7R8, CH2NHCONH2 and derivs., alkoxycarbonyl, CONH2 and derivs.; or R3 forms a double bond between the carbon atom where it is bound to and the neighboring carbon atom of the piperidine cycle; R4 = 1,3-thiazol-2-yl; R5 = H, alkyl, alkylcarbonyl; R6 =alkyl, (CH2) mNH2 and derivs.; m = 1,2, or 3; R7, R8 = independently H, alkyl; R8 = (CH2)qOH, (CH2)qSMe; q = 2 or 3; or R7R8N = aziridine, azetidine, pyrrolidine, piperidine, morpholine; and their salts, hydrates and solvates] were prepared as inhibitors of the binding of 125I NGF to p75NTR (p75 neurotrophic) receptor and of the apoptosis induced by NGF (nerve growth factor) for treating p75NTR related diseases (no data). For example, I (m.p. =  $157-158^{\circ}$ ) was prepared by reacting 2-chloro-1-[4-hydroxy-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-1- ethanone (preparation given) and 1-(1,3-thiazol-2-yl)piperazine dihydrochloride (preparation given) in the presence of KI/K2CO3/MeCN. I inhibited the binding of 125I NGF to p75NTR receptor with IC50 in the range of  $10-11~\mathrm{M}$  to  $10-6~\mathrm{M}$  at the biochem. level. I inhibited the pro-apoptic effect induced by NGF, via growing cells expressing preferentially p75NTR, with IC50 in the range of 10-11 M to 10-6 M at the cellular level.

IT 634613-45-9P, 1-[4-(Aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(1,3-thiazol-2-yl)-1-piperazinyl]-1-ethanone Trihydrochloride

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(NGF binding inhibitor; preparation of piperazinylacylpiperidines as NGF binding inhibitors to p $75\,\mathrm{NTR}$  receptor and of the apoptosis induced by NGF)

RN 634613-45-9 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-thiazolyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

●3 HC1

IT 634613-47-1P, 1-[4-[(Dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(1,3-thiazol-2-yl)-1piperazinyl]-1-ethanone 634613-48-2P, 1-[4-[(Methylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(1,3-thiazol-2-yl)-1piperazinyl]-1-ethanone

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(NGF binding inhibitor; preparation of piperazinylacylpiperidines as NGF binding inhibitors to p75NTR receptor and of the apoptosis induced by NGF)

RN 634613-47-1 CAPLUS

CN Ethanone, 1-[4-[(dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-thiazolyl)-1-piperazinyl]- (CA INDEX NAME)

$$\begin{array}{c}
\text{CF 3} \\
\text{CH 2-NMe 2}
\end{array}$$

RN 634613-48-2 CAPLUS

CN Ethanone, 1-[4-[(methylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-thiazolyl)-1-piperazinyl]- (CA INDEX NAME)

IT 634467-77-9P 634467-82-6P 634468-41-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of piperazinylacylpiperidines as NGF binding inhibitors to p75NTR receptor and of the apoptosis induced by NGF)

RN 634467-77-9 CAPLUS

CN Carbamic acid, [[1-(chloroacetyl)-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 634467-82-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-(2-chloroacety1)-4-[3-(trifluoromethy1)pheny1]-(CA INDEX NAME)

RN 634468-41-0 CAPLUS

CN Carbamic acid, [[1-(chloroacetyl)-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

2

L3 ANSWER 40 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:991506 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 140:27846

TITLE: Preparation of piperazinylacylpiperidines as

inhibitors of NGF binding (nerve growth factor) to p75NTR (p75 neurotrophic) receptor for treating p75NTR

related diseases

INVENTOR(S): Bono, Francoise; Bosch, Michaeel; Dos, Santos Victor;

Herbert, Jean Marc; Nisato, Dino; Tonnerre, Bernard;

Wagnon, Jean

PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr.; Dos Santos, Victor

SOURCE: PCT Int. Appl., 81 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA:	TENT 1	NO.			KINI		DATE			APP	LICAT	ION :	NO.		D.	ATE	
WO	2003	1042	25							WO	2003-	 FR16	85		2	0030	605
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		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN	, MW,	MX,	MZ,	NΙ,	NO,	NZ,	OM,
		PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG	, SK,	SL,	ТJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA	, ZM,	ZW					
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	BG	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FΙ,	FR,	GB,	GR,	HU,	IE,	ΙΤ,	LU,	MC	, NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GÇ	, GW,	ML,	MR,	ΝE,	SN,	TD,	TG
CA	2487	840			A1		2003	1218		CA	2003-	2487	840		2	0030	605
AU	2003	2556	44		A1		2003	1222		AU	2003-	2556	44		2	0030	605
EP	1513	835			A1		2005	0316		ΕP	2003-	7571	08		2	0030	605
EP	1513	835			В1		2006	0816									
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	a, IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	TR,	BG,	CZ,	EE,	HU,	SK	
BR	2003				2005	0329		BR	2003-	1182	8		2	0030	605		
	1675				Α		2005	0928		CN	2003-	8188	08		2	0030	605
JP	2005	5346	61		Τ		2005	1117		JΡ	2004-	5112	95		2	0030	605
	3251				Т		2006	0615		ΑT	2003-	7571	09		2	0030	605
NZ	5370	44			Α		2006	0831		NZ	2003-	5370	44		2	0030	605
ΑT	3364	91			Τ		2006	0915		ΑT	2003-	7571	08		2	0030	605
PΤ	1513	836			Τ		2006	0929		PΤ	2003-	7571	09		2	0030	605
ES	2264	001			Т3		2006	1216		ES	2003-	7571	09		2	0030	605
ES	2271		Т3		2007	0416			2003-					0030	605		
TW	2836		В		2007	0711		${\rm TW}$	2003-	9211	5416		2	0030	606		
US	2005		A1		2005	0811		US	2004-	5167	04		2	0041	202		
ZA	2004	0098.	23		Α		2006	0726		ZA	2004-	9823			2	0041	203
ИО	2004	0053	31		Α		2005	0307		ИО	2004-	5331			2	0041	206
IN	2004	KN01	862		A		2006	0407		IN	2004-	KN18	62		2	0041	206
MX	2004	PA12.	341		Α		2005	0930		MX	2004-	PA12	341		_	0041	
ORIT:	Y APP	LN.	INFO							FR	2002-	7001			A 2	0020	607
										WO	2003-	FR16	85		W 2	0030	605
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OTHER SOURCE(S): MARPAT 140:27846

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$$\begin{array}{c} \text{F}_{3}\text{C} \\ \\ \\ \text{N} \\ \\ \end{array} \begin{array}{c} \text{O} \\ \text{CH}_{2-} \\ \text{N} \\ \end{array} \begin{array}{c} \text{N} \\ \\ \text{N} \\ \end{array} \begin{array}{c} \text{N} \\ \\ \text{II} \end{array}$$

Title compds. I [wherein: Y = (CH2)n; n = 1 or 2; X = (CH2)p; p = 1 or 2; R1 = 1AΒ halo, CF3, alkyl, alkoxy, trifluoromethoxy; R2 = H, halo; R3 = H, OR5, CH2OR5, NH2 and derivs., NHCOR6 and derivs., NHCONH2 and derivs., CH2NR7R8, CH2NHCONH2 and derivs., alkoxycarbonyl, CONH2 and derivs.; or R3 forms a double bond between the carbon atom where it is bound to and the neighboring carbon atom of the piperidine cycle; R4 = (un)substituted pyridinyl, pyrazinyl, pyrimidinyl, pyridazinyl, 3(2H)-pyridazinon-5-yl, 3(2H)-pyridazinon-4-yl; R5 = H, alkyl, alkylcarbonyl; R6 = alkyl, (CH2)mNH2 and derivs.; m = 1, 2, or 3; R7, R8 = independently H, alkyl; R8 = (CH2)qOH, (CH2)qSMe; q = 2 or 3; or R7R8N = aziridine, azetidine, pyrrolidine, piperidine, morpholine; and their salts, hydrates and solvates] were prepared as inhibitors of the binding of 125I NGF to p75NTR (p75 neurotrophic) receptor and of the apoptosis induced by NGF (nerve growth factor) for treating p75NTR related diseases (no data). For example, II $\bullet$ HCl was prepared by reacting 1-(2-pyrazinyl)piperazine (preparation given) with 2-chloro-1-[4-[3-(trifluoromethyl)phenyl]-1piperidinyl]-1-ethanone (preparation given) in the presence of KI/K2CO3/MeCN, followed by acidulation with HCl. I inhibited the binding of 125I NGF to p75NTR receptor with IC50 in the range of 10-11 M to 10-6 M at the biochem. level. I inhibited the pro-apoptic effect induced by NGF, via growing cells expressing preferentially p75NTR, with IC50 in the range of  $10-11~\mathrm{M}$  to  $10-6~\mathrm{M}$ at the cellular level.

IT 634461-23-7P, 1-[4-(Aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone <math>634464-53-2P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(NGF binding inhibitor; preparation of piperazinylacylpiperidines as inhibitors of the binding of NGF to p75NTR receptor and of the apoptosis induced by NGF)

RN 634461-23-7 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{CF}_3 \\ \text{N} \\ \text{N} \end{array}$$

RN 634464-53-2 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]-1-piperazinyl]-, hydrochloride (1:2) (CA INDEX NAME)

●2 HCl

apoptosis induced by NGF)

634461-29-3P, 1-[4-(Aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-ΤT piperidinyl]-2-[4-(2-pyrimidinyl)-1-piperazinyl]-1-ethanone Trihydrochloride 634462-38-7P 634462-68-3P 634462-83-2P, 1-[4-[(Dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone 634463-03-9P, 1-[4-(Aminomethyl)-4-(4-chlorophenyl)-1piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone Trifluoroacetate 634464-03-2P 634464-08-7P, 1-[4-[(Methylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1piperazinyl]-1-ethanone 634464-15-6P, 1-[4-[(Isopropylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone 634464-20-3P, 1-[4-[(N-Methylisopropylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone Trihydrochloride 634464-24-7P 634464-29-2P 634464-34-9P 634464-39-4P 634464-44-1P 634464-48-5P, 1-[4-(Aminomethyl)-4-(3-chlorophenyl)-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperidinyl]-2-[4-(4-pyrazinyl)piperazinyl]-1-ethanone 634484-72-5P, 1-[4-(Aminomethyl)-4-(3methoxyphenyl)-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone Dioxalate RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (NGF binding inhibitor; preparation of piperazinylacylpiperidines as

inhibitors of the binding of NGF to p75NTR receptor and of the

RN 634461-29-3 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrimidinyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

$$\begin{array}{c|c}
CF3 \\
CH_2-NH_2
\end{array}$$

●3 HCl

RN 634462-38-7 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-[4-(2-pyrazinyl)-1-piperazinyl]acetyl]-4-[3-(trifluoromethyl)phenyl]-, hydrochloride (1:3) (CA INDEX NAME)

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●3 HCl

RN 634462-68-3 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-[2-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, ethanedioate (2:3) (CA INDEX NAME)

CM 1

CRN 634462-67-2 CMF C23 H29 F3 N6 O

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

CRN 144-62-7 CMF C2 H2 O4

RN 634462-83-2 CAPLUS

CN Ethanone, 1-[4-[(dimethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} \text{CF} 3 \\ \hline \\ \text{N} \\ \hline \\ \text{N} \\ \end{array}$$

RN 634463-03-9 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-(4-chlorophenyl)-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 634463-02-8 CMF C22 H29 C1 N6 O

$$\begin{array}{c|c}
C1 \\
CH_2-NH_2
\end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 634464-03-2 CAPLUS

CN 3(2H)-Pyridazinone, 5-[4-[2-[4-(aminomethyl)-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-oxoethyl]-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

●3 HCl

RN 634464-08-7 CAPLUS

CN Ethanone, 1-[4-[(methylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]- (CA INDEX NAME)

RN 634464-15-6 CAPLUS

CN Ethanone, 1-[4-[[(1-methylethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

$$\begin{array}{c} \text{CF3} \\ \text{N} \\ \text{N} \\ \text{N} \end{array}$$

RN 634464-20-3 CAPLUS

CN Ethanone, 1-[4-[[methyl(1-methylethyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

$$\begin{array}{c} \text{CF3} \\ \text{N} \\ \text{N} \\ \text{CH2} \\ \text{C} \\ \text{N} \\ \text{Pr-i} \end{array}$$

●3 HCl

RN 634464-24-7 CAPLUS

CN Ethanone, 1-[4-[[(2-methylpropyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

$$\begin{array}{c|c} \text{CF3} \\ \hline \\ \text{N} \\ \hline \\ \text{N} \\ \hline \end{array}$$

RN 634464-29-2 CAPLUS

CN Ethanone, 1-[4-[[methyl(2-methylpropyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

$$\begin{array}{c} \text{CF}_3 \\ \text{N} \\ \text{N} \\ \text{N} \\ \text{CH}_2 \\ \text{C} \\ \text{N} \\ \text{Bu-i} \end{array}$$

●3 HC1

RN 634464-34-9 CAPLUS

CN Ethanone, 1-[4-[(diethylamino)methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]- (CA INDEX NAME)

RN 634464-39-4 CAPLUS

CN Ethanone, 1-[4-[[(3-methylbutyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-(CA INDEX NAME)

RN 634464-44-1 CAPLUS

CN Ethanone, 1-[4-[[methyl(3-methylbutyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, hydrochloride (1:3) (CA INDEX NAME)

$$\begin{array}{c} \text{CF3} \\ \text{Me} \\ \text{CH2-N-CH2-CH2-CHMe2} \end{array}$$

●3 HC1

RN 634464-48-5 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-(3-chlorophenyl)-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 634464-72-5 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-(3-methoxyphenyl)-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, ethanedioate (1:2) (CA INDEX NAME)

CM 1

CRN 634464-71-4 CMF C23 H32 N6 O2

$$\bigcap_{N} \bigcap_{N} \bigcap_{N} \bigcap_{CH_2-CH_2-NH_2}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

IT 634464-71-4P 634467-77-9P, tert-Butyl
 [[1-(2-Chloroacetyl)-4-[3-(trifluoromethyl)phenyl]-4 piperidinyl]methyl]carbamate 634467-82-6P, 1-(2-Chloroacetyl)-4 [3-(trifluoromethyl)phenyl]-4-piperidinecarboxamide 634468-41-0P
 , tert-Butyl [[1-(2-chloroacetyl)-4-[3-(trifluoromethyl)phenyl]-4 piperidinyl]methyl]methylcarbamate 634469-57-1P, tert-Butyl
 [[1-[2-[4-(2-pyrazinyl)-1-piperazinyl]-1-oxoethyl]-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl]carbamate
 634469-86-6P, tert-Butylmethyl [[1-[2-[4-(2-pyrazinyl)-1 piperazinyl]1-oxoethyl]-4-[3-(trifluoromethyl)phenyl]-4 piperidinyl]methyl]carbamate
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(intermediate; preparation of piperazinylacylpiperidines as inhibitors of the binding of NGF to p75NTR receptor and of the apoptosis induced by NGF)

RN 634464-71-4 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-(3-methoxyphenyl)-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]- (CA INDEX NAME)

RN 634467-77-9 CAPLUS

CN Carbamic acid, [[1-(chloroacetyl)-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 634467-82-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-(2-chloroacetyl)-4-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 634468-41-0 CAPLUS

CN Carbamic acid, [[1-(chloroacetyl)-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 634469-57-1 CAPLUS

CN Carbamic acid, [[1-[(4-pyrazinyl-1-piperazinyl)acetyl]-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 634469-86-6 CAPLUS

CN Carbamic acid, [[1-[(4-pyrazinyl-1-piperazinyl)acetyl]-4-[3-(trifluoromethyl)phenyl]-4-piperidinyl]methyl]-, 2,2-dimethylpropyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CF 3} \\ \text{CH}_2 \text{NH} \\ \text{CH}_2 \text{CH}_2 \text{NH} \\ \text{CH}_2 \text{CMe}_3 \end{array}$$

IT 634469-80-0P, 1-[4-(Aminomethyl)-4-phenyl-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-1-ethanone

RL: SPN (Synthetic preparation); PREP (Preparation)
(intermediate: preparation of piperazinylacylpiperidi

(intermediate; preparation of piperazinylacylpiperidines as inhibitors of the binding of NGF to p $75\,\mathrm{NTR}$  receptor and of the apoptosis induced by NGF)

RN 634469-80-0 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-phenyl-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]- (CA INDEX NAME)

$$\begin{array}{c|c}
 & \text{Ph} \\
 & \text{CH}_2 - \text{CH}_2 - \text{NH}_2
\end{array}$$

IT 634469-81-1P, 1-[4-(Aminomethyl)-4-phenyl-1-piperidinyl]-2-[4-(2-

pyrazinyl)-1-piperazinyl]-1-ethanone Trifluoroacetate
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of piperazinylacylpiperidines as inhibitors of the binding of NGF to p75NTR receptor and of the apoptosis induced by NGF)

RN 634469-81-1 CAPLUS

CN Ethanone, 1-[4-(aminomethyl)-4-phenyl-1-piperidinyl]-2-[4-(2-pyrazinyl)-1-piperazinyl]-, 2,2,2-trifluoroacetate (1:3) (CA INDEX NAME)

CM 1

CRN 634469-80-0 CMF C22 H30 N6 O

CM 2

CRN 76-05-1 CMF C2 H F3 O2

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 41 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:951026 CAPLUS Full-text

DOCUMENT NUMBER: 140:4965

TITLE: Heterocyclic oxophenyl-cyclohexyl-propanolamine derivatives, and the production and use thereof in

therapeutics as  $\beta$ 3 receptor agonists

INVENTOR(S): Bovy, Philippe R.; Cecchi, Roberto; Croci, Tiziano;

Venier, Olivier

PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr. SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

AΒ

PA					KIND		DATE		APPLICATION NO.								
					A2				WO 2003-FR1579								
							ΑU,			BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
							DK,										
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							TM,										
							ΙΕ,										
							CM,		•	•		•					
FR				A1 20031205			FR 2002-6560				20020529						
	FR 2840304																
AU					A1 20031212			AU 2003-260569					20030526				
					A2 20050309			EP 2003-755201						20030526			
EP	EP 1511728			B1 20070314													
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							RO,										·
JP	2005																526
									5 AT 2003-755201								
								US 2004-515093									
PRIORIT	PRIORITY APPLN. INFO.:									FR 2	002-	6560			A 2	0020	529
											003-					0030	
OTHER S	OTHER SOURCE(S): GI				MAR	PAT	140:	4965									

NHSO2R3, (un) substituted NHSO2Ph or NHSO2-alkyl-Ph; n = 0, 1, or 2; R3 = alkyl; A = (un)substituted piperidino, piperazino, 4-spirocyclic piperidino, or their 5- and 7-membered homologs; piperidino substituents (2) = H, alkyl, OH, cyano, Ph, PhCH2, piperidyl, CONH2, COPh, COOR3, CH(Ph)(OH), and C(Ph)2(OH) (at least one substituent is not H); or substituents form (un) substituted 6-membered aromatic ring; piperazino substituent (1) = H, alkyl, Ph, or CH2Ph; spiro ring = (un)substituted, (un)saturated carbocycle or N1-2 heterocycle which may be benzo-fused; including acid addition salts, hydrates, and/or solvates]. The invention also relates to a method for the production of I, and the use of I in therapeutics. A table of 25 compds. I is given, and prepns. of several I and various intermediates are described. Usage of I in a wide variety of specific therapeutic applications is claimed. For instance, reductive amination of Et 4-(4-oxocyclohexyl)benzoate with benzylamine gave trans-Et 4-[4-(benzylamino)cyclohexyl]benzoate. This amine underwent N-alkylation with a corresponding benzyl-protected epoxide alc., followed by saponification of the ester (94%), amidation of the acid with 4benzylpiperidine, and hydrogenolytic debenzylation of two benzyl groups, to give title compound II. In an assay for  $\beta 3$  receptor agonism in human neuroblastoma cells SKNMC, in the presence of the selective  $\beta1$  and  $\beta2$ antagonists CGP 20712 and ICI 118551, compds. I had a pKa of  $\geq$  6.0, generally 6.0-7.6. The efficacy of I was generally 60-90%. Tests against  $\beta$ 1 and  $\beta$ 2 receptor subtypes showed that I were at least 50 times more selective for  $\beta$ 3 receptors.

IT 628722-56-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of heterocyclic oxophenyl-cyclohexyl-propanolamine derivs. as  $\beta 3$  adrenoceptor agonists)

RN 628722-56-5 CAPLUS

CN 4-Piperidinecarboxamide, 1-[4-[trans-4-[[(2S)-2-hydroxy-3-[4-hydroxy-3-(methylsulfonyl)phenoxy]propyl]amino]cyclohexyl]benzoyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

L3 ANSWER 42 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:875252 CAPLUS  $\underline{\text{Full-text}}$ 

DOCUMENT NUMBER: 139:364832

TITLE: Preparation of piperidine derivatives as ACAT

inhibitors for treatment of hyperlipemia and

arteriosclerosis

INVENTOR(S):
Ban, Hitoshi; Muraoka, Masami

PATENT ASSIGNEE(S): Sumitomo Pharmaceuticals Co., Ltd., Japan

SOURCE: PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P	PATENT NO.				KIND DATE			APPLICATION NO.						DATE				
W	WO 2003091216				A1 20031106			WO 2003-JP5124					20030422					
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KR,	KΖ,	LC,	LK,	LR,	LS,
			LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MΖ,	NΙ,	NO,	NΖ,	OM,	PH,
			PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
			UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW						
		RW:	GH,	GM,	ΚE,	LS,	MW,	MΖ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
			KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
			FI,	FR,	GB,	GR,	HU,	IE,	ΙΤ,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
			BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG
A	AU 2003231388				A1 20031110				AU 2003-231388					20030422				
E	EP 1500648			A1 20050126			EP 2003-725627						20030422					
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	ВG,	CZ,	EE,	HU,	SK	
U	US 20050165057			A1		2005	0728		US 2	004-	5113	19		2	0041	015		
PRIORI	PRIORITY APPLN. INFO.:				.:					JP 2002-124311					A 20020425			
											WO 2	003-	JP51	24	,	W 2	0030	422

OTHER SOURCE(S): MARPAT 139:364832

GI

$$\begin{array}{c}
R31 \quad R32 \\
R-N \quad m^{Y} \quad H \quad H \\
R33 \quad R34 \quad I
\end{array}$$

$$\begin{array}{c}
R=N \quad m^{Y} \quad R32 \\
R=N \quad M^{X} \quad R35 \\
R34 \quad R34 \quad I$$

$$\begin{array}{c}
I-Pr \quad M+2 \\
R \quad M+1 \quad R32 \\$$

The title compds. I [wherein m and n = independently 0-4; m + n = 4; L = (un)substituted cycloalkyl or aryl; Y = (un)substituted aryl; R = H, (un)substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl, or COH; R31-R34 = independently H, OH, alkoxy, aralkyloxy, or (un)substituted alkyl, etc.; R35 and R36 = independently H or (un)substituted alkyl; or R35 and R36 together form an oxo group] and prodrugs or pharmaceutically acceptable salts thereof are prepared as acyl-CoA:cholesterol acyltransferase (ACAT) inhibitors, and are useful for the treatment of hyperlipemia, arteriosclerosis, etc. (no data). For example, the compound II was prepared in a multi-step synthesis. II showed 63% inhibitory activity against human ACAT at the concentration of 500 nM.

IT 620593-36-4P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate; preparation of piperidine derivs. as ACAT inhibitors for treatment of hyperlipemia and arteriosclerosis)

RN 620593-36-4 CAPLUS

CN Urea, N-[[1-acetyl-4-(3-methoxyphenyl)-4-piperidinyl]methyl]-N'-[2,6-bis(1-methylethyl)phenyl]- (CA INDEX NAME)

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 43 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:855758 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 139:364829

TITLE: Preparation of heterocyclo inhibitors of potassium

channel function

INVENTOR(S): Lloyd, John; Jeon, Yoon T.; Finlay, Heather; Yan, Lin;

Beaudoin, Serge; Gross, Michael F.

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA; Icagen, Inc.

SOURCE: PCT Int. Appl., 330 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND DATE	E APPL	ICATION NO.	DATE
WO 2003088908 WO 2003088908		31030 WO 2 40527	003-US11807	20030416
			BG, BR, BY, BZ, EE, ES, FI, GB,	

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,

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LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003223651
                                20031103
                                         AU 2003-223651
                         Α1
                                                                   20030416
                                            EP 2003-719792
     EP 1501467
                          Α2
                                20050202
                                                                   20030416
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
                                            JP 2003-585661
                          Τ
     JP 2005529114
                                20050929
                                                                   20030416
     NO 2004004351
                                20041013
                                            NO 2004-4351
                          Α
                                                                    20041013
PRIORITY APPLN. INFO.:
                                            US 2002-374279P
                                                                   20020419
                                                                P
                                            WO 2003-US11807
                                                                W 20030416
OTHER SOURCE(S):
                        MARPAT 139:364829
GΙ
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The title compds. [I; m, p = 0-3 (provided that the sum of m and p is at least 2); Q = NR1, O, S, SO, SO2; R1 = H, C(:W)NR6R7, SO2NR6R7, OCONR6R7, etc.; R2 = heteroaryl, heteroarylalkyl, aryl, etc.; J = a bond, alkylene; R3 = R5, OR5, SO2R5, etc.; R5 = CN, heteroaryl, aryl, etc.; R6, R7 = H, alkyl, OH, etc.; W = (un)substituted NH, N(CO2H), N(CN), N(SO2H), CH(NO2); Rx = H, alkyl, hydroxyalkyl, aryl, etc.], useful as inhibitors of potassium channel function (especially inhibitors of the Kv1 subfamily of voltage gated K+ channels, especially inhibitors Kv1.5 which has been linked to the ultra-rapidly activating delayed rectifier K+ current IKur) in the prevention and treatment of arrhythmia and IKur-associated conditions, were prepared E.g., a multistep synthesis of II [starting from bis(2-chloroethyl)amine], was given. Pharmaceutical composition comprising the compound I is claimed.

IT 619280-93-2P 619292-31-8P 619292-35-2P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of substituted piperidines as inhibitors of potassium channel function)

RN 619280-93-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[(phenylmethyl)amino]carbonyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619292-31-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(3-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619292-35-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(3-amino-2-pyrazinyl)carbonyl]amino]meth yl]-4-(3-fluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

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ΙT
     619280-97-6P 619281-01-5P 619281-05-9P
     619281-09-3P 619281-13-9P 619281-17-3P
     619281-21-9P 619281-25-3P 619281-29-7P
     619281-33-3P 619281-62-8P 619281-68-4P
     619281-71-9P 619281-74-2P 619281-77-5P
     619281-80-0P 619281-83-3P 619281-86-6P
     619281-89-9P 619281-92-4P 619281-95-7P
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     619282-53-0P 619282-57-4P 619282-60-9P
     619282-63-2P 619282-66-5P 619282-69-8P
     619282-72-3P 619282-75-6P 619282-78-9P
     619282-81-4P 619282-84-7P 619282-87-0P
     619282-91-6P 619282-95-0P 619282-98-3P
     619283-01-1P 619283-04-4P 619283-07-7P
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     619283-28-2P 619283-31-7P 619283-34-0P
     619283-37-3P 619283-39-5P 619283-42-0P
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619295-13-5P 619295-14-6P 619295-15-7P
619295-16-8P 619295-17-9P 619295-18-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (preparation of substituted piperidines as inhibitors of potassium channel
   function)
619280-97-6 CAPLUS
1-Piperidinecarboxylic acid, 4-[[[(2-methoxyphenyl)methyl]amino]carbonyl]-
4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)
```

RN

CN

RN 619281-01-5 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[2-(4-methoxyphenyl)ethyl]amino]carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619281-05-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(2,4-dimethoxyphenyl)methyl]amino]carbon yl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619281-09-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[2-(2,6-dichlorophenyl)ethyl]amino]carbon yl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619281-13-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[(3-phenylpropyl)amino]carbonyl]-

, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619281-17-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(pentylamino)carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619281-21-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(3-methoxypropyl)amino]carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619281-25-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(4-methoxyphenyl)methyl]amino]carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619281-29-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3,4-difluorophenyl)methyl]amino]carbony 1]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619281-33-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(4-fluorophenyl)methyl]amino]carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ &$$

RN 619281-62-8 CAPLUS

CN 4-Piperidinecarboxamide, 4-phenyl-1-[[(1R,2R)-2-phenylcyclopropyl]carbonyl]-N-(phenylmethyl)-, rel- (CA INDEX NAME)

Relative stereochemistry.

RN 619281-68-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[(phenylmethyl)amino]carbonyl]-, ethyl ester (CA INDEX NAME)

RN 619281-71-9 CAPLUS

CN 4-Piperidinecarboxamide, N-[(2,4-dimethoxyphenyl)methyl]-4-phenyl-1-

[[(1R,2R)-2-phenylcyclopropyl]carbonyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.

RN 619281-74-2 CAPLUS

CN 4-Piperidinecarboxamide, N-[(2,4-dimethoxyphenyl)methyl]-1-(4-methoxybenzoyl)-4-phenyl- (CA INDEX NAME)

RN 619281-77-5 CAPLUS

CN 4-Piperidinecarboxamide, N-[(2,4-dimethoxyphenyl)methyl]-1-[2-(4-fluorophenyl)acetyl]-4-phenyl- (CA INDEX NAME)

RN 619281-80-0 CAPLUS

CN 4-Piperidinecarboxamide, N-[(2, 4-dimethoxyphenyl)methyl]-1-[2-(3-methoxyphenyl)acetyl]-4-phenyl- (CA INDEX NAME)

RN

$$\begin{array}{c} \text{OMe} \\ \text{CH}_2 - \text{NH} - \begin{array}{c} \\ \\ \end{array} \\ \text{Ph} \end{array}$$

RN 619281-86-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-(3-cyclopentyl-1-oxopropyl)-N-[(2,4-dimethoxyphenyl)methyl]-4-phenyl- (CA INDEX NAME)

RN 619281-89-9 CAPLUS

CN 4-Piperidinecarboxamide, N-[(2,4-dimethoxyphenyl)methyl]-1-(1-oxobutyl)-4-phenyl- (CA INDEX NAME)

$$\mathsf{n}\text{-}\mathsf{Pr} = \bigcup_{\mathsf{Ph}}^{\mathsf{O}} \bigcup_{\mathsf{NH-CH}_2}^{\mathsf{OMe}} \mathsf{OMe}$$

RN 619281-92-4 CAPLUS

CN 4-Piperidinecarboxamide, N-[(2,4-dimethoxyphenyl)methyl]-1-(2-fluorobenzoyl)-4-phenyl- (CA INDEX NAME)

RN 619281-95-7 CAPLUS

CN 4-Piperidinecarboxamide, 1-(cyclohexylcarbonyl)-N-[(2,4-dimethoxyphenyl)methyl]-4-phenyl- (CA INDEX NAME)

RN 619282-25-6 CAPLUS

CN 4-Piperidinecarboxamide, N-[(4-methoxyphenyl)methyl]-4-phenyl-1-[[(1R,2R)-2-phenylcyclopropyl]carbonyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.

RN 619282-28-9 CAPLUS

CN 4-Piperidinecarboxamide, 1-(4-methoxybenzoyl)-N-[(4-methoxyphenyl)methyl]-4-phenyl- (CA INDEX NAME)

RN 619282-31-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-(4-fluorophenyl)acetyl]-N-[(4-methoxyphenyl)methyl]-4-phenyl- (CA INDEX NAME)

RN 619282-34-7 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-(3-methoxyphenyl)acetyl]-N-[(4-methoxyphenyl)methyl]-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \hline \\ \text{CH}_{2} - \text{NH} - \\ \hline \\ \text{Ph} \end{array}$$

RN 619282-37-0 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-(4-chlorophenoxy)acetyl]-N-[(4-methoxyphenyl)methyl]-4-phenyl- (CA INDEX NAME)

RN 619282-40-5 CAPLUS

CN 4-Piperidinecarboxamide, 1-(3-cyclopentyl-1-oxopropyl)-N-[(4-methoxyphenyl)methyl]-4-phenyl- (CA INDEX NAME)

$$\bigcirc \mathsf{CH}_2 - \mathsf{CH}_2 - \bigcirc \mathsf{NH} - \mathsf{CH}_2 - \mathsf{NH} - \mathsf{CH}_2$$

RN 619282-43-8 CAPLUS

CN 4-Piperidinecarboxamide, N-[(4-methoxyphenyl)methyl]-1-(1-oxobutyl)-4-phenyl- (CA INDEX NAME)

RN 619282-46-1 CAPLUS

CN 4-Piperidinecarboxamide, 1-(2-fluorobenzoyl)-N-[(4-methoxyphenyl)methyl]-4-phenyl- (CA INDEX NAME)

RN 619282-49-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-(cyclohexylcarbonyl)-N-[(4-methoxyphenyl)methyl]-4-phenyl- (CA INDEX NAME)

RN 619282-53-0 CAPLUS

CN 4-Piperidinecarboxamide, N-[(2-methoxyphenyl)methyl]-4-phenyl-1-[[(1R,2R)-2-phenylcyclopropyl]carbonyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.

RN 619282-57-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-(4-methoxybenzoyl)-N-[(2-methoxyphenyl)methyl]-4-phenyl- (CA INDEX NAME)

RN 619282-60-9 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-(4-fluorophenyl)acetyl]-N-[(2-methoxyphenyl)methyl]-4-phenyl- (CA INDEX NAME)

RN 619282-63-2 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-(3-methoxyphenyl)acetyl]-N-[(2-methoxyphenyl)methyl]-4-phenyl- (CA INDEX NAME)

RN 619282-66-5 CAPLUS

CN 4-Piperidinecarboxamide,  $1-[2-(4-\text{chlorophenoxy}) \cdot \text{acetyl}]-N-[(2-\text{methoxyphenyl}) \cdot \text{methyl}]-4-\text{phenyl}- (CA INDEX NAME)$ 

$$\bigcirc \mathsf{OMe} \\ \mathsf{CH}_2 - \mathsf{NH} - \bigcirc \mathsf{C} \\ \mathsf{Ph}$$

RN 619282-69-8 CAPLUS

CN 4-Piperidinecarboxamide, 1-(3-cyclopentyl-1-oxopropyl)-N-[(2-methoxyphenyl)methyl]-4-phenyl- (CA INDEX NAME)

RN 619282-72-3 CAPLUS

CN 4-Piperidinecarboxamide, N-[(2-methoxyphenyl)methyl]-1-(1-oxobutyl)-4-phenyl- (CA INDEX NAME)

RN 619282-75-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-(2-fluorobenzoyl)-N-[(2-methoxyphenyl)methyl]-4-phenyl- (CA INDEX NAME)

RN 619282-78-9 CAPLUS

CN 4-Piperidinecarboxamide, 1-(cyclohexylcarbonyl)-N-[(2-methoxyphenyl)methyl]-4-phenyl- (CA INDEX NAME)

$$\bigcirc \mathsf{OMe} \\ \mathsf{CH}_{2} - \mathsf{NH} - \bigcirc \\ \bigcirc \\ \mathsf{Ph}$$

RN 619282-81-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-(4-methoxybenzoyl)-4-phenyl-N-(phenylmethyl)-(CA INDEX NAME)

RN 619282-84-7 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-(4-fluorophenyl)acetyl]-4-phenyl-N-(phenylmethyl)- (CA INDEX NAME)

$$\stackrel{\text{F}}{=} \underbrace{ \stackrel{\circ}{\text{CH}_2} - \stackrel{\circ}{\text{U}} }_{\text{CH}_2} - \underbrace{ \stackrel{\circ}{\text{Ph}} }_{\text{NH}-\text{CH}_2-\text{Ph}}$$

RN 619282-87-0 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-(3-methoxyphenyl)acetyl]-4-phenyl-N-(phenylmethyl)- (CA INDEX NAME)

RN 619282-91-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-(4-chlorophenoxy)acetyl]-4-phenyl-N-(phenylmethyl)- (CA INDEX NAME)

RN 619282-95-0 CAPLUS

CN 4-Piperidinecarboxamide, 1-(3-cyclopentyl-1-oxopropyl)-4-phenyl-N-(phenylmethyl)- (CA INDEX NAME)

RN 619282-98-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-(1-oxobutyl)-4-phenyl-N-(phenylmethyl)- (CA INDEX NAME)

RN 619283-01-1 CAPLUS

CN 4-Piperidinecarboxamide, 1-(2-fluorobenzoyl)-4-phenyl-N-(phenylmethyl)-(CA INDEX NAME)

RN 619283-04-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-(cyclohexylcarbonyl)-4-phenyl-N-(phenylmethyl)-(CA INDEX NAME)

RN 619283-07-7 CAPLUS

CN 4-Piperidinecarboxamide, N-(3-methoxypropyl)-4-phenyl-1-[[(1R,2R)-2-phenylcyclopropyl]carbonyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.

RN 619283-10-2 CAPLUS

CN 4-Piperidinecarboxamide, 1-(4-methoxybenzoyl)-N-(3-methoxypropyl)-4-phenyl-(CA INDEX NAME)

CN 4-Piperidinecarboxamide, 1-[2-(4-fluorophenyl)acetyl]-N-(3-methoxypropyl)-4-phenyl- (CA INDEX NAME)

F 
$$CH_2$$
  $O$   $NH$   $CH_2$   $O$   $OMe$ 

RN 619283-16-8 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-(3-methoxyphenyl)acetyl]-N-(3-methoxypropyl)-4-phenyl- (CA INDEX NAME)

RN 619283-19-1 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-(4-chlorophenoxy)acetyl]-N-(3-methoxypropyl)-4-phenyl- (CA INDEX NAME)

RN 619283-22-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-(3-cyclopentyl-1-oxopropyl)-N-(3-methoxypropyl)-4-phenyl- (CA INDEX NAME)

RN 619283-25-9 CAPLUS

CN 4-Piperidinecarboxamide, N-(3-methoxypropyl)-1-(1-oxobutyl)-4-phenyl- (CA INDEX NAME)

RN 619283-28-2 CAPLUS

CN 4-Piperidinecarboxamide, 1-(2-fluorobenzoyl)-N-(3-methoxypropyl)-4-phenyl-(CA INDEX NAME)

RN 619283-31-7 CAPLUS

CN 4-Piperidinecarboxamide, 1-(cyclohexylcarbonyl)-N-(3-methoxypropyl)-4-phenyl- (CA INDEX NAME)

RN 619283-34-0 CAPLUS

CN 4-Piperidinecarboxamide, N-[2-(4-methoxyphenyl)ethyl]-4-phenyl-1-[[(1R,2R)-2-phenylcyclopropyl]carbonyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.

RN 619283-37-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-(4-methoxybenzoyl)-N-[2-(4-methoxyphenyl)ethyl]-

RN 619283-39-5 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-(4-fluorophenyl)acetyl]-N-[2-(4-methoxyphenyl)ethyl]-4-phenyl- (CA INDEX NAME)

RN 619283-42-0 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-(3-methoxyphenyl)acetyl]-N-[2-(4-methoxyphenyl)ethyl]-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \\ \text{CH}_2\text{--} \text{CH}_2\text{--} \text{NH} - \\ \\ \\ \text{Ph} \end{array}$$

RN 619283-44-2 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-(4-chlorophenoxy)acetyl]-N-[2-(4-methoxyphenyl)ethyl]-4-phenyl- (CA INDEX NAME)

RN 619283-47-5 CAPLUS

CN 4-Piperidinecarboxamide, 1-(3-cyclopentyl-1-oxopropyl)-N-[2-(4-methoxyphenyl)ethyl]-4-phenyl- (CA INDEX NAME)

RN 619283-50-0 CAPLUS

CN 4-Piperidinecarboxamide, N-[2-(4-methoxyphenyl)ethyl]-1-(1-oxobutyl)-4-phenyl- (CA INDEX NAME)

RN 619283-53-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-(2-fluorobenzoyl)-N-[2-(4-methoxyphenyl)ethyl]-4-phenyl- (CA INDEX NAME)

RN 619283-56-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-(cyclohexylcarbonyl)-N-[2-(4-methoxyphenyl)ethyl]-4-phenyl- (CA INDEX NAME)

RN 619283-59-9 CAPLUS

CN 4-Piperidinecarboxamide, 4-phenyl-1-[[(1R,2R)-2-phenylcyclopropyl]carbonyl]-N-(3-phenylpropyl)-, rel- (CA INDEX NAME)

Relative stereochemistry.

RN 619283-62-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-(4-methoxybenzoyl)-4-phenyl-N-(3-phenylpropyl)-(CA INDEX NAME)

RN 619283-64-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-(4-fluorophenyl)acetyl]-4-phenyl-N-(3-phenylpropyl)- (CA INDEX NAME)

RN 619283-67-9 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-(3-methoxyphenyl)acetyl]-4-phenyl-N-(3-phenylpropyl)- (CA INDEX NAME)

RN 619283-70-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-[2-(4-chlorophenoxy)acetyl]-4-phenyl-N-(3-phenylpropyl)- (CA INDEX NAME)

RN 619283-73-7 CAPLUS

CN 4-Piperidinecarboxamide, 1-(3-cyclopentyl-1-oxopropyl)-4-phenyl-N-(3-phenylpropyl)- (CA INDEX NAME)

RN 619283-76-0 CAPLUS

CN 4-Piperidinecarboxamide, 1-(1-oxobutyl)-4-phenyl-N-(3-phenylpropyl)- (CA INDEX NAME)

RN 619283-79-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-(2-fluorobenzoyl)-4-phenyl-N-(3-phenylpropyl)- (CA INDEX NAME)

RN 619283-82-8 CAPLUS

CN 4-Piperidinecarboxamide, 1-(cyclohexylcarbonyl)-4-phenyl-N-(3-phenylpropyl)- (CA INDEX NAME)

RN 619283-85-1 CAPLUS

CN 4-Piperidinecarboxamide, N-[(2,4-dimethoxyphenyl)methyl]-1-(1-oxo-2-buten-1-yl)-4-phenyl- (CA INDEX NAME)

$$Me\_CH\_CH\_CH\_0$$

$$N_{Ph}$$

$$N_{Ph}$$

$$N_{Ph}$$

$$N_{Ph}$$

$$N_{Ph}$$

$$N_{Ph}$$

$$N_{Ph}$$

$$N_{Ph}$$

$$N_{Ph}$$

RN 619283-97-5 CAPLUS

CN 4-Piperidinecarboxamide, N-[(4-methoxyphenyl)methyl]-1-(1-oxo-2-buten-1-yl)-4-phenyl- (CA INDEX NAME)

$$CH_2-NH-C$$

$$Ph$$

$$CH_2-NH-C$$

RN 619284-03-6 CAPLUS

CN 4-Piperidinecarboxamide, N-[(2-methoxyphenyl)methyl]-1-(1-oxo-2-buten-1-yl)-4-phenyl- (CA INDEX NAME)

RN 619284-08-1 CAPLUS

CN 4-Piperidinecarboxamide, 1-(1-oxo-2-buten-1-yl)-4-phenyl-N-(phenylmethyl)-(CA INDEX NAME)

RN 619284-11-6 CAPLUS

CN 4-Piperidinecarboxamide, N-(3-methoxypropyl)-1-(1-oxo-2-buten-1-yl)-4-phenyl- (CA INDEX NAME)

RN 619284-17-2 CAPLUS

CN 4-Piperidinecarboxamide, N-[2-(4-methoxyphenyl)ethyl]-1-(1-oxo-2-buten-1-yl)-4-phenyl- (CA INDEX NAME)

RN 619284-23-0 CAPLUS

CN 4-Piperidinecarboxamide, 1-(1-oxo-2-buten-1-y1)-4-phenyl-N-(3-phenylpropyl)- (CA INDEX NAME)

RN 619284-28-5 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[(phenylmethyl)amino]carbonyl]-, phenylmethyl ester (CA INDEX NAME)

RN 619284-31-0 CAPLUS

CN 1,4-Piperidinedicarboxamide, 4-phenyl-N1-[(1R)-1-phenylethyl]-N4-(phenylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

RN 619284-55-8 CAPLUS

CN 4-Piperidinecarboxamide, 1-(2-phenoxyacetyl)-4-phenyl-N-(phenylmethyl)-(CA INDEX NAME)

RN 619284-58-1 CAPLUS

CN 4-Piperidinecarboxamide, 1-(2-phenoxyacetyl)-4-phenyl-N-(3-phenylpropyl)-(CA INDEX NAME)

RN 619284-61-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3,4-difluorophenyl)methyl]amino]carbony 1]-4-phenyl-, phenylmethyl ester (CA INDEX NAME)

RN 619284-64-9 CAPLUS

CN 4-Piperidinecarboxamide, N-[(3,4-difluorophenyl)methyl]-1-(2-phenoxyacetyl)-4-phenyl- (CA INDEX NAME)

RN 619284-70-7 CAPLUS

CN 1,4-Piperidinedicarboxamide, N4-[(3,4-difluorophenyl)methyl]-4-phenyl-N1-(phenylmethyl)- (CA INDEX NAME)

RN 619284-73-0 CAPLUS

CN 4-Piperidinecarboxamide, N-[(3,4-difluorophenyl)methyl]-1-(1-oxo-3-phenyl-2-propen-1-yl)-4-phenyl- (CA INDEX NAME)

Ph\_CH=CH\_C
$$N \longrightarrow C$$
 $N \longrightarrow C$ 
 $N$ 

RN 619284-76-3 CAPLUS

CN 4-Piperidinecarboxamide, N-[(3,4-difluorophenyl)methyl]-4-phenyl-1-(2-phenylacetyl)- (CA INDEX NAME)

RN 619284-79-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-benzoyl-N-[(3,4-difluorophenyl)methyl]-4-phenyl-(CA INDEX NAME)

RN 619284-82-1 CAPLUS

CN 4-Piperidinecarboxamide, N-[(3,4-difluorophenyl)methyl]-1-(1-oxopropyl)-4-phenyl- (CA INDEX NAME)

RN 619284-85-4 CAPLUS

CN 4-Piperidinecarboxamide, N-[(3,4-difluorophenyl)methyl]-4-phenyl-1-[2-(phenylmethoxy)acetyl]- (CA INDEX NAME)

RN 619284-88-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[[1-(phenylmethyl)-3-pyrrolidinyl]amino]carbonyl]-, phenylmethyl ester (CA INDEX NAME)

RN 619284-91-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[[4-(methylsulfonyl)phenyl]methyl]amino]c arbonyl]-4-phenyl-, phenylmethyl ester (CA INDEX NAME)

$$Me = \bigcup_{CH_2-NH} \bigcup_{Ph} \bigcup_{Ph} \bigcup_{C-O-CH_2-Ph} \bigcup_{C-O-CH_2-P$$

RN 619284-94-5 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(4-fluorophenyl)methyl]amino]carbonyl]-4-phenyl-, phenylmethyl ester (CA INDEX NAME)

RN 619284-98-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[2-(3-chlorophenyl)ethyl]amino]carbonyl]-4-phenyl-, phenylmethyl ester (CA INDEX NAME)

RN 619285-02-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[[2-[3-(trifluoromethyl)phenyl]ethyl]amino]carbonyl]-, phenylmethyl ester (CA INDEX NAME)

RN 619285-06-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(1-naphthalenylmethyl)amino]carbonyl]-4-phenyl-, phenylmethyl ester (CA INDEX NAME)

RN 619285-10-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[[[4-(trifluoromethyl)phenyl]methyl]amino]carbonyl]-, phenylmethyl ester (CA INDEX NAME)

RN 619285-14-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-methylbenzo[b]thien-2-yl)methyl]amino]carbonyl]-4-phenyl-, phenylmethyl ester (CA INDEX NAME)

RN 619285-18-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[[1-(phenylmethyl)-4-piperidinyl]amino]carbonyl]-, phenylmethyl ester (CA INDEX NAME)

RN 619285-21-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[2-(1-methyl-2-pyrrolidinyl)ethyl]amino]carbonyl]-4-phenyl-, phenylmethyl ester (CA INDEX NAME)

$$\begin{array}{c}
\stackrel{\text{Me}}{\longrightarrow} & \stackrel{\text{O}}{\longrightarrow} & \stackrel{\text{O}}{\longrightarrow} & \stackrel{\text{O}}{\longrightarrow} & \stackrel{\text{C}}{\longrightarrow} & \stackrel{\text{C}}{\longrightarrow$$

RN 619285-24-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(cyclopropylmethyl)amino]carbonyl]-4-phenyl-, phenylmethyl ester (CA INDEX NAME)

RN 619285-27-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[[2-(2-pyridinyl)ethyl]amino]carbonyl]-, phenylmethyl ester (CA INDEX NAME)

RN 619285-30-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(2,3-dihydro-1H-inden-1-yl)amino]carbonyl]-4-phenyl-, phenylmethyl ester (CA INDEX NAME)

RN 619285-33-5 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[2-(4-morpholinyl)ethyl]amino]carbonyl]-4-phenyl-, phenylmethyl ester (CA INDEX NAME)

RN 619285-36-8 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(2-chlorophenyl)-1-oxopropyl]-N-[(4-fluorophenyl)methyl]-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c|c} F & \bigcirc & \bigcirc & \bigcirc & \bigcirc \\ CH2-NH-C & \bigcirc & \bigcirc & \bigcirc \\ Ph & & & \\ \end{array}$$

RN 619285-39-1 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(2-chlorophenyl)-1-oxopropyl]-4-phenyl-N-(3-phenylpropyl)- (CA INDEX NAME)

RN 619285-42-6 CAPLUS

CN 4-Piperidinecarboxamide, N-[(4-fluorophenyl)methyl]-1-[1-oxo-3-[4-(trifluoromethyl)phenyl]propyl]-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c|c} F & & \\ \hline \\ CH2-NH-C & \\ \hline \\ Ph & \\ \end{array}$$

RN 619285-45-9 CAPLUS

CN 4-Piperidinecarboxamide, N-[(4-fluorophenyl)methyl]-1-(1-oxo-3-phenyl-2-propyn-1-yl)-4-phenyl- (CA INDEX NAME)

$$CH_2-NH-C$$

RN 619285-48-2 CAPLUS

CN 4-Piperidinecarboxamide, 1-[1-oxo-3-[4-(trifluoromethyl)phenyl]propyl]-4-phenyl-N-(3-phenylpropyl)- (CA INDEX NAME)

RN 619285-51-7 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(3,4-difluorophenyl)-1-oxopropyl]-4-phenyl-N-(3-phenylpropyl)- (CA INDEX NAME)

RN 619285-54-0 CAPLUS

CN 4-Piperidinecarboxamide, 1-(1-oxo-3-phenyl-2-propyn-1-yl)-4-phenyl-N-(3-phenylpropyl)- (CA INDEX NAME)

RN 619285-60-8 CAPLUS

CN 4-Piperidinecarboxamide, N-([1,1'-biphenyl]-2-ylmethyl)-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

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RN 619285-63-1 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl-N-[[4-(trifluoromethyl)phenyl]methyl]- (CA INDEX NAME)

RN 619285-66-4 CAPLUS

CN 4-Piperidinecarboxamide, N-[(4-fluorophenyl)methyl]-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

RN 619285-69-7 CAPLUS

CN 4-Piperidinecarboxamide, N-[(4-chlorophenyl)methyl]-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

RN 619285-72-2 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl-N-[[3-(trifluoromethyl)phenyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

RN 619285-75-5 CAPLUS

CN 4-Piperidinecarboxamide, N-[[3,5-bis(trifluoromethyl)phenyl]methyl]-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ \end{array}$$

RN 619285-78-8 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl-N-(2-thienylmethyl)- (CA INDEX NAME)

RN 619285-81-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl-N-(phenylmethyl)- (CA INDEX NAME)

$$\begin{array}{c} \text{F} \\ \\ \text{CH}_2-\text{CH}_2-\text{C} \\ \end{array} \\ \begin{array}{c} \text{O} \\ \text{N} \\ \end{array} \\ \begin{array}{c} \text{Ph} \\ \text{C-NH-CH}_2-\text{Ph} \\ \end{array}$$

RN 619285-84-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-N-[(3-methylphenyl)methyl]-4-phenyl- (CA INDEX NAME)

RN 619285-87-9 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-N-[(4-methylphenyl)methyl]-4-phenyl- (CA INDEX NAME)

RN 619285-90-4 CAPLUS

CN 4-Piperidinecarboxamide, N-[(2-chlorophenyl)methyl]-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c|c}
 & C1 \\
 & CH_2-NH-C \\
 & Ph
\end{array}$$

$$\begin{array}{c}
 & C \\
 & CH_2-CH_2
\end{array}$$

$$\begin{array}{c}
 & CH_2-CH_2
\end{array}$$

RN 619285-93-7 CAPLUS

CN 4-Piperidinecarboxamide, N-(2,3-dihydro-1H-inden-1-yl)-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

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RN 619285-96-0 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl-N-(1,2,3,4-tetrahydro-1-naphthalenyl)- (CA INDEX NAME)

PAGE 1-A

RN 619285-99-3 CAPLUS

CN 4-Piperidinecarboxamide, N-[2-(4-chlorophenyl)ethyl]-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

$$C1$$
 $CH_2-CH_2-NH-C$ 
 $CH_2-CH_2-CH_2-CH_2$ 
 $CH_2-CH_2-CH_2-CH_2$ 

RN 619286-02-1 CAPLUS

CN 4-Piperidinecarboxamide, N-[2-(3-chlorophenyl)ethyl]-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

$$\mathsf{C1} \qquad \qquad \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{NH} - \mathsf{U} \qquad \qquad \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2 - \mathsf{CH}_2$$

RN 619286-05-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl-N-[2-[3-(trifluoromethyl)phenyl]ethyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{F 3C} \\ \text{CH}_2\text{-}\text{CH}_2\text{-}\text{NH} \\ \text{Ph} \end{array} \\ \begin{array}{c} \text{O} \\ \text{Ph} \end{array} \\ \begin{array}{c} \text{O} \\ \text{CH}_2\text{-}\text{CH}_2 \\ \text{CH}_2\text{-}\text{CH}_2 \\ \text{O} \end{array}$$

N 619286-08-7 CAPLUS

CN 4-Piperidinecarboxamide, N-[2-(4-ethylphenyl)ethyl]-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c} \text{Et} \\ \\ \text{CH2-CH2-NH-} \\ \\ \\ \text{Fh} \\ \end{array}$$

RN 619286-11-2 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl-N-[2-(2-thienyl)ethyl]- (CA INDEX NAME)

RN 619286-14-5 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-N-[2-(1H-indol-3-yl)ethyl]-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 619286-17-8 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl-N-(4-phenylbutyl)- (CA INDEX NAME)

F CH2 CH2 CH2 
$$\stackrel{\circ}{\text{CH}_2}$$
  $\stackrel{\circ}{\text{C}}$  NH (CH2) 4 - Ph

RN 619286-20-3 CAPLUS

CN 4-Piperidinecarboxamide, N-[2-(3-fluorophenyl)ethyl]-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

RN 619286-23-6 CAPLUS

CN 4-Piperidinecarboxamide, N-[2-(2-fluorophenyl)ethyl]-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

RN 619286-26-9 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-N-(2-phenoxyethyl)-4-phenyl- (CA INDEX NAME)

$$\label{eq:ch2-ch2-oph} \text{F} \\ \text{CH}_2 - \text{CH}_2 \\ \text{CH}_2 - \text{CH}_2 \\ \text{OPh} \\ \text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{OPh} \\ \text{CH}_3 - \text{CH}_2 \\ \text{CH}_3 - \text{CH}_3 \\ \text{CH}_$$

RN 619286-29-2 CAPLUS

CN 4-Piperidinecarboxamide, N-(cyclohexylmethyl)-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

$$CH_2-NH-U$$

$$Ph$$

$$C-CH_2-CH_2$$

RN 619286-35-0 CAPLUS

CN 4-Piperidinecarboxamide, N-(5-chloro-2-benzoxazolyl)-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

RN 619286-38-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-N-(1-methyl-3-phenyl-1H-pyrazol-5-yl)-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{N} \\ \text{NH} \\ \text{C} \\ \text{Ph} \\ \end{array}$$

RN 619286-41-8 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl-N-(4-phenyl-2-thiazolyl)- (CA INDEX NAME)

$$Ph \longrightarrow NH \longrightarrow C \longrightarrow Ph$$

RN 619286-44-1 CAPLUS

CN 4-Piperidinecarboxamide, N-(1H-benzimidazol-2-ylmethyl)-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

RN 619286-47-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-N-methyl-4-phenyl-N-(2-pyridinylmethyl)- (CA INDEX NAME)

RN 619286-50-9 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-N-methyl-4-phenyl-N-(3-pyridinylmethyl)- (CA INDEX NAME)

$$\begin{array}{c|c}
 & \text{Me} & \text{O} & \text{O} & \text{CH}_2 - \text{CH}_2 - \text{CH}_2
\end{array}$$

RN 619286-53-2 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-N-[2-(2-methoxyphenyl)ethyl]-4-phenyl- (CA INDEX NAME)

RN 619286-56-5 CAPLUS

CN 4-Piperidinecarboxamide, N-[2-(4-bromophenyl)ethyl]-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

RN 619286-59-8 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-N-[2-(4-methylphenyl)ethyl]-4-phenyl- (CA INDEX NAME)

Me 
$$CH_2-CH_2-NH-C$$
  $Ph$   $C-CH_2-CH_2$ 

RN 619286-62-3 CAPLUS

CN 4-Piperidinecarboxamide, N-[2-(2,5-dimethoxyphenyl)ethyl]-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

RN 619286-65-6 CAPLUS

CN 4-Piperidinecarboxamide, N-[2-(1,3-benzodioxol-5-yl)ethyl]-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

RN 619286-68-9 CAPLUS

CN 4-Piperidinecarboxamide, N-[2-(3,4-dichlorophenyl)ethyl]-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

$$C1$$
 $CH_2-CH_2-NH-C$ 
 $CH_2-CH_2-CH_2$ 
 $CH_2-CH_2-CH_2$ 

RN 619286-71-4 CAPLUS

CN 4-Piperidinecarboxamide, N-[2-(2,4-dimethylphenyl)ethyl]-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{CH}_2\text{-CH}_2\text{-NH} \\ \text{Ph} \end{array}$$

RN 619286-74-7 CAPLUS

CN 4-Piperidinecarboxamide, N-[2-(3,4-dimethylphenyl)ethyl]-1-[3-(4-fluorophenyl)-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

Me 
$$CH_2-CH_2-NH-C$$
  $CH_2-CH_2-CH_2$ 

RN 619286-77-0 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-N-[2-(2-methylphenyl)ethyl]-4-phenyl- (CA INDEX NAME)

RN 619286-80-5 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-N-[2-(3-methylphenyl)ethyl]-4-phenyl- (CA INDEX NAME)

RN 619286-83-8 CAPLUS

CN 4-Piperidinecarboxamide, 1-[3-(4-fluorophenyl)-1-oxopropyl]-N-[(3-methylbenzo[b]thien-2-yl)methyl]-4-phenyl- (CA INDEX NAME)

619286-86-1 CAPLUS

RN

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[(2-pyridinylmethyl)amino]carbony l]-, phenylmethyl ester (CA INDEX NAME)

RN 619286-89-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[(2-pyridinylamino)carbonyl]-, phenylmethyl ester (CA INDEX NAME)

RN 619286-92-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(2-methoxy-3-pyridinyl)amino]carbonyl]-4-phenyl-, phenylmethyl ester (CA INDEX NAME)

RN 619287-29-5 CAPLUS

CN 4-Piperidinecarboxamide, N-([1,1'-biphenyl]-2-ylmethyl)-1-(1-oxo-3-phenylpropyl)-4-phenyl- (CA INDEX NAME)

RN 619287-31-9 CAPLUS

CN 4-Piperidinecarboxamide, N-methyl-1-(1-oxo-3-phenylpropyl)-4-phenyl-N-(2-phenylethyl)- (CA INDEX NAME)

RN 619287-33-1 CAPLUS

CN 4-Piperidinecarboxamide, N-([1,1'-biphenyl]-3-ylmethyl)-1-(1-oxo-3-phenylpropyl)-4-phenyl- (CA INDEX NAME)

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RN 619287-35-3 CAPLUS

CN 4-Piperidinecarboxamide, N-[(3-methylphenyl)methyl]-1-(1-oxo-3-phenylpropyl)-4-phenyl- (CA INDEX NAME)

RN 619287-37-5 CAPLUS

CN 4-Piperidinecarboxamide, N-[(4-chlorophenyl)methyl]-1-(1-oxo-3-phenylpropyl)-4-phenyl- (CA INDEX NAME)

RN 619287-39-7 CAPLUS

CN 4-Piperidinecarboxamide, 1-(1-oxo-3-phenylpropyl)-4-phenyl-N-(1-

phenylethyl) - (CA INDEX NAME)

RN 619287-41-1 CAPLUS

CN 4-Piperidinecarboxamide, 1-(1-oxo-3-phenylpropyl)-4-phenyl-N-(2-phenylpropyl)- (CA INDEX NAME)

$$\begin{array}{c} \text{Ph} \\ \text{Me-CH-CH2-NH-C} \\ \end{array}$$

RN 619287-43-3 CAPLUS

CN 4-Piperidinecarboxamide, N-(1-methylpropyl)-1-(1-oxo-3-phenylpropyl)-4-phenyl- (CA INDEX NAME)

RN 619287-45-5 CAPLUS

CN 4-Piperidinecarboxamide, N-(2,3-dihydro-1H-inden-2-yl)-1-(1-oxo-3-phenylpropyl)-4-phenyl- (CA INDEX NAME)

RN 619287-47-7 CAPLUS

CN 4-Piperidinecarboxamide, N-[(2,6-dimethoxyphenyl)methyl]-1-(1-oxo-3-phenylpropyl)-4-phenyl- (CA INDEX NAME)

RN 619287-49-9 CAPLUS

CN 4-Piperidinecarboxamide, 1-(1-oxo-3-phenylpropyl)-4-phenyl-N-[[3-(trifluoromethyl)phenyl]methyl]- (CA INDEX NAME)

RN 619287-51-3 CAPLUS

CN 4-Piperidinecarboxamide, N-cyclopentyl-1-(1-oxo-3-phenylpropyl)-4-phenyl-(CA INDEX NAME)

RN 619287-53-5 CAPLUS

CN 4-Piperidinecarboxamide, N-methyl-1-(1-oxo-3-phenylpropyl)-4-phenyl-N- (phenylmethyl)- (CA INDEX NAME)

RN 619287-55-7 CAPLUS

CN 4-Piperidinecarboxamide, N-[(2S)-2,3-dihydro-2-hydroxy-1H-inden-1-yl]-1-(1-oxo-3-phenylpropyl)-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 619287-57-9 CAPLUS

CN 4-Piperidinecarboxamide, N-[(1-methyl-1H-imidazol-2-yl)methyl]-1-(1-oxo-3-phenylpropyl)-4-phenyl-N-(phenylmethyl)- (CA INDEX NAME)

RN 619287-65-9 CAPLUS

CN 4-Piperidinecarboxamide, N-[2-(1H-indol-3-yl)ethyl]-1-(1-oxo-3-phenylpropyl)-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 619287-69-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-(1-oxo-3-phenylpropyl)-4-phenyl-N-(5-phenyl-1H-pyrazol-3-yl)- (CA INDEX NAME)

CN 4-Piperidinecarboxamide, N-[(3,4-difluorophenyl)methyl]-1-(1-oxo-3-phenylpropyl)-4-phenyl- (CA INDEX NAME)

RN 619287-75-1 CAPLUS

CN 4-Piperidinecarboxamide, 1-(1-oxo-3-phenylpropyl)-4-phenyl-N-[1-(phenylmethyl)-3-pyrrolidinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

RN 619287-77-3 CAPLUS

CN 4-Piperidinecarboxamide, N-[[4-(methylsulfonyl)phenyl]methyl]-1-(1-oxo-3-phenylpropyl)-4-phenyl- (CA INDEX NAME)

RN 619287-79-5 CAPLUS

CN 4-Piperidinecarboxamide, N-[(4-fluorophenyl)methyl]-1-(1-oxo-3-phenylpropyl)-4-phenyl- (CA INDEX NAME)

RN 619287-81-9 CAPLUS

CN 4-Piperidinecarboxamide, N-[2-(3-chloropheny1)ethy1]-1-(1-oxo-3-chloropheny1)ethy1]

phenylpropyl)-4-phenyl- (CA INDEX NAME)

RN 619287-83-1 CAPLUS

CN 4-Piperidinecarboxamide, 1-(1-oxo-3-phenylpropyl)-4-phenyl-N-[2-[3-(trifluoromethyl)phenyl]ethyl]- (CA INDEX NAME)

$$CH_2-CH_2-NH-C$$

$$Fh$$

RN 619287-85-3 CAPLUS

CN 4-Piperidinecarboxamide, N-(1-naphthalenylmethyl)-1-(1-oxo-3-phenylpropyl)-4-phenyl- (CA INDEX NAME)

RN 619287-87-5 CAPLUS

CN 4-Piperidinecarboxamide, 1-(1-oxo-3-phenylpropyl)-4-phenyl-N-[[4-(trifluoromethyl)phenyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

RN 619287-89-7 CAPLUS

CN 4-Piperidinecarboxamide, N-[(3-methylbenzo[b]thien-2-yl)methyl]-1-(1-oxo-3-phenylpropyl)-4-phenyl- (CA INDEX NAME)

RN 619287-91-1 CAPLUS

CN 4-Piperidinecarboxamide, 1-(1-oxo-3-phenylpropyl)-4-phenyl-N-[1-(phenylmethyl)-4-piperidinyl]- (CA INDEX NAME)

RN 619287-93-3 CAPLUS

CN 4-Piperidinecarboxamide, N-[2-(1-methyl-2-pyrrolidinyl)ethyl]-1-(1-oxo-3-phenylpropyl)-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c}
\text{Me} \\
\text{C} \\
\text{CH}_2 - \text{CH}_2 - \text{NH} - \text{C} \\
\text{Ph}
\end{array}$$

RN 619287-95-5 CAPLUS

CN 4-Piperidinecarboxamide, N-(cyclopropylmethyl)-1-(1-oxo-3-phenylpropyl)-4-phenyl- (CA INDEX NAME)

RN 619287-97-7 CAPLUS

CN 4-Piperidinecarboxamide, 1-(1-oxo-3-phenylpropyl)-4-phenyl-N-[2-(2-pyridinyl)ethyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\$$

RN 619287-99-9 CAPLUS

CN 4-Piperidinecarboxamide, N-(2,3-dihydro-1H-inden-1-yl)-1-(1-oxo-3-phenylpropyl)-4-phenyl- (CA INDEX NAME)

RN 619288-01-6 CAPLUS

CN 4-Piperidinecarboxamide, N-[2-(4-morpholinyl)ethyl]-1-(1-oxo-3-phenylpropyl)-4-phenyl- (CA INDEX NAME)

RN 619290-90-3 CAPLUS

CN 1-Propanone, 1-[4-[(1-isoquinolinylamino)methyl]-4-phenyl-1-piperidinyl]-3-phenyl- (CA INDEX NAME)

RN 619292-32-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(3-fluorophenyl)-4-[[(2-methoxybenzoyl)amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619292-37-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(2,5-difluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619292-38-5 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(2,5-difluorophenyl)-4-[[(2-methoxybenzoyl)amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619292-39-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(2,5-difluorophenyl)-4-[[(2-hydroxy-6-methoxybenzoyl)amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619292-40-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-amino-2-pyrazinyl)carbonyl]amino]meth y1]-4-(2,5-difluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619292-49-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(3-fluorophenyl)-4-[[(2-hydroxy-6-methoxybenzoyl)amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619292-51-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(3,5-difluorophenyl)-4-[[(2-hydroxy-6-methoxybenzoyl)amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619292-52-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(3-amino-2-pyrazinyl)carbonyl]amino]meth yl]-4-(3,5-difluorophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619292-53-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(2-hydroxy-6-methoxybenzoyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c|c}
OH & O \\
C-NH-CH2 & C-OBu-t
\end{array}$$

$$\begin{array}{c|c}
OBu-t \\
OMe \\
F_3C
\end{array}$$

RN 619292-54-5 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-amino-2-pyrazinyl)carbonyl]amino]meth yl]-4-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619292-55-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(2-methoxybenzoyl)amino]methyl]-4-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c|c}
 & \circ \\
 & \circ \\$$

RN 619295-01-1 CAPLUS

CN 2-Pyrazinecarboxamide, 3-amino-N-[[1-(1-oxo-3-phenylpropyl)-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 619295-02-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-amino-2-pyrazinyl)carbonyl]amino]meth yl]-4-phenyl-, ethyl ester (CA INDEX NAME)

RN

CN 2-Pyrazinecarboxamide, 3-amino-N-[(1-benzoyl-4-phenyl-4-piperidinyl)methyl]- (CA INDEX NAME)

RN 619295-04-4 CAPLUS

CN 2-Pyrazinecarboxamide, 3-amino-N-[[4-phenyl-1-(3-pyridinylcarbonyl)-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 619295-05-5 CAPLUS

CN 2-Pyrazinecarboxamide, 3-amino-N-[[4-phenyl-1-(4-pyridinylcarbonyl)-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 619295-13-5 CAPLUS

CN 1-Propanone, 1-[4-[(1H-indazol-3-ylamino)methyl]-4-phenyl-1-piperidinyl]-3-phenyl- (CA INDEX NAME)

$$\begin{array}{c|c}
 & O \\
 & O \\$$

RN 619295-14-6 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(2-methoxybenzoyl)amino]methyl]-N,N-dimethyl-

4-phenyl- (CA INDEX NAME)

RN 619295-15-7 CAPLUS

CN Benzamide, N-[[1-[[(3S)-3-hydroxy-1-pyrrolidinyl]carbonyl]-4-phenyl-4-piperidinyl]methyl]-2-methoxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 619295-16-8 CAPLUS

CN Benzamide, 2-methoxy-N-[[1-(4-morpholinylcarbonyl)-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ &$$

RN 619295-17-9 CAPLUS

CN Benzamide, 2-methoxy-N-[[4-phenyl-1-(1-pyrrolidinylcarbonyl)-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 619295-18-0 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(2-methoxybenzoyl)amino]methyl]-N-methyl-N-(1-methylethyl)-4-phenyl- (CA INDEX NAME)

IT 158144-82-2P 619295-87-3P 619295-88-4P 619295-90-8P 619295-91-9P 619295-92-0P 619295-94-2P 619295-99-7P 619296-00-3P 619296-01-4P 619296-03-6P 619296-04-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of substituted piperidines as inhibitors of potassium channel function)

RN 158144-82-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN

CN 1-Piperidinecarboxylic acid, 4-[(hydroxyamino)iminomethyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619295-88-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[imino[(1-oxo-3-phenylpropoxy)amino]methyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 619295-90-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[5-fluoro-2-(methylamino)phenyl]amino]car bonyl]-4-phenyl-, phenylmethyl ester (CA INDEX NAME)

RN 619295-91-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(2-amino-5-fluorophenyl)methylamino]carbonyl]-4-phenyl-, phenylmethyl ester (CA INDEX NAME)

$$Ph-CH_2-O-C \\ N \\ Ph \\ C-N \\ NH_2$$

RN

RN 619295-94-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-amino-2-pyrazinyl)carbonyl]amino]meth yl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c|c}
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 & \circ \\$$

RN 619295-99-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(2-fluorobenzoyl)amino]methyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

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RN 619296-00-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(2-fluorophenyl)thioxomethyl]amino]methy 1]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c|c}
S & OBu-t \\
\hline
C & NH & CH_2 & Ph
\end{array}$$

RN 619296-01-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(1H-indazol-3-ylamino)methyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c|c}
 & O \\
 & O \\$$

RN 619296-03-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(2-methoxybenzoyl)amino]methyl]-4-phenyl-, 4-nitrophenyl ester (CA INDEX NAME)

RN 619296-04-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(2-methoxyphenyl)thioxomethyl]amino]meth yl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

L3 ANSWER 44 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:511094 CAPLUS Full-text

DOCUMENT NUMBER: 139:85365

TITLE: Preparation of pyrrolopyrimidine A2b selective

antagonist compounds, method of synthesis and

therapeutic use

INVENTOR(S): Castelhano, Arlindo L.; Mckibben, Bryan; Steinig, Arno

G.

PATENT ASSIGNEE(S): Osi Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 223 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

									APPLICATION NO.								
WO	2003	0533	61		A2		2003	0703									
WO	2003																
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NΖ,	OM,	PH,
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		UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW						
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	AΖ,	BY,
		KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG		
CA	2470	044			A1		2003	0703		CA 2	2002-	2470	044		2	0021	220
AU	2002	3668	01		A1		2003	0709		AU 2	2002-	3668	01		2	0021	220
US	2003	0229	067		A1		2003	1211		US 2	2002-	3260	05		2	0021	220
EP	1467	995			A2		2004	1020		EP 2	2002-	8056	44		2	0021	220
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	SK		
BR	2002	0152	79		Α		2005	0510		BR 2	2002-	1527	9		2	0021	220
JP	2005	5253	05		T		2005	0825		JP 2	2003-	5541	21		2	0021	220
CN	1816	551			Α		2006	0809		CN 2	2002-	8282	72		2	0021	220
MX	20041	PA05	861		Α		2004	1029		MX 2	2004-	PA58	61		2	0040	616
IN	20041	DN01	869		Α		2007	0511		IN 2	2004-	DN18	69		2	0040	630
RIORIT	Y APP	LN.	INFO	.:						US 2	2001-	3434	43P		P 2	0011	220
										WO 2	2002-	US40	890	1	W 2	0021	220
HER S	R SOURCE(S):				CASREACT 139:85365; MARPAT 139:85365												
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The subject invention provides pyrrolopyrimidines (shown as I; see below for variable definitions; e.g. N-[2-[6-[1-[2-(2-chlorophenyl)ethyl]piperidin-4-yloxymethyl]-2-phenyl-7H-pyrrolo[2,3-d]pyrimidin-4-ylamino]ethyl]acetamide (II)) or a specific enantiomer thereof, or a specific tautomer thereof, or a pharmaceutically acceptable salt thereof, and a method for treating a disease associated with the A2b adenosine receptor. For I: R1 is a (un)substituted alkyl (substituent = hydroxyl, dihydroxy, carboxyl, -C(0)NRaRb, -NRaRb, -NRaC(0)NRaRb, -NRaC(0)ORa, -OC(0)NRaRb, or -NHC(0)Ra). R2 is H or a (un)substituted alkyl (substituent = hydroxyl, dihydroxyl, carboxyl, -C(0)NRaRb, -NRaC(0)NRaRb, -NRaC(0)NRaRb, -NRaC(0)ORa, -OC(0)NRaRb, or -NHC(0)Ra), or R1, R2 and N together form a substituted piperazine, substituted azetidine, or

a pyrrolidine ring substituted with -(CH2)2OH or -CH2C(O)OH. R3 is a (un) substituted Ph or a 5-6 membered heteroaryl ring, wherein the substituent is halogen, hydroxyl, cyano, (C1-C15)alkyl, (C1-C15)alkoxyl or -NRaRb; R4 is H or (un)substituted (C1-C15)alkyl; R5 is -(CH2)mOR6, -CHNOR7, -C(0)NR8R9, -(CH2)mC(0)OR10, -(CH2)kC(0)NR11R12; addnl. details are given in the claims. Radioligand binding assays yielded selectivities for the A2b receptor relative to the A1, A2a and A3 receptors for 9 examples of I, e.g. 26 times for II. About 26 example prepns. of I and intermediates and characterization data for hundreds of I and intermediates are included. For example, III can be prepared by reacting 4-chloro-2-phenyl-7H-pyrrolo[2,3-d]pyrimidine with PhSO2Cl and a reducing agent in the presence of solvent to produce 7benzenesulfonyl-4-chloro-2- phenyl-7H-pyrrolo[2,3-d]pyrimidine, which was reacted with CO2 in the presence of LDA and a solvent to produce lithium 7benzenesulfonyl-4- chloro-2-phenyl-7H-pyrrolo[2,3-d]pyrimidine-6-carboxylate, which was reacted with AcNHCH2CH2NH2 in the presence of solvent to give 4-(2acetylaminoethylamino)-7-benzenesulfonyl-2-phenyl-7H-pyrrolo[2,3d]pyrimidine-6-carboxylic acid, which was deprotected with a hydroxide base and subsequently condensed with amines.

553633-82-2P, 1-[4-[(2-Acetylaminoethyl)amino]-2-phenyl-7H-ΙT pyrrolo[2,3-d]pyrimidine-6-carbonyl]-4-phenylpiperidine-4-carboxylic acid amide 553633-83-3P, 1-[4-[(2-Acetylaminoethyl)amino]-2-phenyl-7Hpyrrolo[2,3-d]pyrimidine-6-carbonyl]-4-phenylpiperidine-4-carboxylic acid methylamide 553633-84-4P, 1-[4-[(2-Acetylaminoethyl)amino]-2phenyl-7H-pyrrolo[2,3-d]pyrimidine-6-carbonyl]-4-phenylpiperidine-4carboxylic acid dimethylamide 553633-85-5P, 1-[4-[(2-Acetylaminoethyl)amino]-2-phenyl-7H-pyrrolo[2,3-d]pyrimidine-6-carbonyl]-4phenylpiperidine-4-carboxylic acid benzylamide 553633-86-6P, 1-[4-[(2-Acetylaminoethyl)amino]-2-phenyl-7H-pyrrolo[2,3-d]pyrimidine-6carbonyl]-4-phenylpiperidine-4-carboxylic acid ethylamide 553633-87-7P, 1-[4-[(2-Acetylaminoethyl)amino]-2-phenyl-7Hpyrrolo[2,3-d]pyrimidine-6-carbonyl]-4-phenylpiperidine-4-carboxylic acid diethylamide 553633-92-4P, 1-[4-[(2-Acetylaminoethyl)amino]-2phenyl-7H-pyrrolo[2,3-d]pyrimidine-6-carbonyl]-4-phenylpiperidine-4carboxylic acid tert-butylamide RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of pyrrolopyrimidine A2b selective antagonist compds., method of synthesis and therapeutic use)

RN 553633-82-2 CAPLUS

CN

 $\begin{tabular}{ll} 4-Piperidine carboxamide, & 1-[[4-[[2-(acetylamino)ethyl]amino]-2-phenyl-7H-pyrrolo[2,3-d]pyrimidin-6-yl]carbonyl]-4-phenyl- & (CA INDEX NAME) \\ \end{tabular}$ 

RN 553633-83-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-[[4-[[2-(acetylamino)ethyl]amino]-2-phenyl-7H-pyrrolo[2,3-d]pyrimidin-6-yl]carbonyl]-N-methyl-4-phenyl- (CA INDEX NAME)

RN 553633-84-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-[[4-[[2-(acetylamino)ethyl]amino]-2-phenyl-7H-pyrrolo[2,3-d]pyrimidin-6-yl]carbonyl]-N,N-dimethyl-4-phenyl- (CA INDEX NAME)

RN 553633-85-5 CAPLUS

CN 4-Piperidinecarboxamide, 1-[[4-[[2-(acetylamino)ethyl]amino]-2-phenyl-7H-pyrrolo[2,3-d]pyrimidin-6-yl]carbonyl]-4-phenyl-N-(phenylmethyl)- (CA INDEX NAME)

RN 553633-86-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-[[4-[[2-(acetylamino)ethyl]amino]-2-phenyl-7H-pyrrolo[2,3-d]pyrimidin-6-yl]carbonyl]-N-ethyl-4-phenyl- (CA INDEX NAME)

CN 4-Piperidinecarboxamide, 1-[[4-[[2-(acetylamino)ethyl]amino]-2-phenyl-7Hpyrrolo[2,3-d]pyrimidin-6-yl]carbonyl]-N,N-diethyl-4-phenyl- (CA INDEX NAME)

553633-92-4 CAPLUS RN

CN 4-Piperidinecarboxamide, 1-[[4-[[2-(acetylamino)ethyl]amino]-2-phenyl-7Hpyrrolo[2,3-d]pyrimidin-6-yl]carbonyl]-N-(1,1-dimethylethyl)-4-phenyl-(CA INDEX NAME)

ANSWER 45 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN 1.3

ACCESSION NUMBER: 2003:363833 CAPLUS Full-text

DOCUMENT NUMBER: 139:159504

TITLE: Antifungal activity of a Candida albicans GGTase I

inhibitor-Alanine conjugate. Inhibition of Rholp

prenylation in C. albicans

AUTHOR(S): Murthi, Krishna K.; Smith, Susan E.; Kluge, Arthur F.;

Bergnes, Gustave; Bureau, Patrick; Berlin, Vivian

CORPORATE SOURCE: Department of Chemistry, GPC Biotech, Inc., Waltham,

MA, 02451, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2003),

13(11), 1935-1937

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

An alanine conjugate of a Candida albicans geranylgeranyl transferase I inhibitor was synthesized to facilitate its uptake into the fungal cell. The antifungal activity of CaGGTase-Ala conjugate is demonstrated. It is also shown that the CaGGTase-Ala conjugate affects prenylation of endogenous Rholp, but has no effect on prenylation of endogenous Ras1p.

256368-02-2P ΤТ

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(antifungal activity of a Candida albicans GGTase I inhibitor-alanine conjugate and inhibition of Rholp prenylation in C. albicans)

RN 256368-02-2 CAPLUS

CN L-Alanine, L-cysteinyl-4-phenyl-4-piperidinecarbonyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 574704-99-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(antifungal activity of a Candida albicans GGTase I inhibitor-alanine conjugate and inhibition of Rholp prenylation in C. albicans)

RN 574704-99-7 CAPLUS

CN L-Alanine, N-[[1-[(1,1-dimethylethoxy)carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-L-leucyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 46 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:356199 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 138:368921

TITLE: Preparation of compounds as C-C chemokine receptor 8

antagonists, pharmaceutical compositions and use

against inflammatory or viral disorders

INVENTOR(S): Ghosh, Shomir; Patane, Michael A.; Carson, Kenneth G.;

Chi, I-Cheng Shannon; Ye, Qing; Elder, Amy M.;

Jenkins, Tracy J.

PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 204 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

GΙ

PA'	PATENT NO.					KIND DATE									DATE		
	2003		_		A2		2003			 WO 2	002-	US34	845			0021	
WO	2003	0372	71		А3		2003	1016									
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NΖ,	OM,	PH,
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	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	SK,	TR,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG			
AU	2002	3632	36		A1		2003	0512		AU 2	002-	3632	36		2	0021	030
US	2005	0143	372		A1		2005	0630		US 2	004-	4902	23		2	0040	825
PRIORIT	RIORITY APPLN. INFO.:									US 2	001-	3406	63P		P 2	0011	030
										WO 2	002-	US34	845	1	W 2	0021	030
OTHER S	THER SOURCE(S):					PAT	138:368921										

AΒ The invention relates to (shown as I; variables defined below; e.g. 1-[1-(2',6'-dichlorobiphenyl-3-ylmethyl)piperidin-4-yl]-1,3- dihydrobenzimidazol-2one and 3-(3-phenoxybenzyl)-2,3,4,5-tetrahydro-1H- benzo[d]azepine). Preferred compds. are antagonists of C-C chemokine receptor 8 (no data). invention also relates to a method for treating a subject having an inflammatory disorder or viral disorder comprising administering to a subject in need thereof an effective amount of a compound of the invention. Although the methods of preparation are not claimed, hundreds of example prepns. are included. For I: L = O, S, NRa, a bond, SO2, C(O), and (CR'R'')m; Ra = H, (un)substituted alkyl, alkylaryl, and cycloalkyl; a is 0 to 3; b is 0 to 3; m is 1 to 8; R' and R'' = H, (un) substituted alkyl, cyano and (un) substituted alkenyl. R6, R7, R8, R9 and R10 = H, hydroxy, halogen, (un)substituted C1-C10 alkyl, (un)substituted C2-C10 alkenyl, (un)substituted C2-C10 alkynyl, (un) substituted C3-C10 cycloalkyl, (un) substituted C3-C10 cycloalkenyl, (un) substituted C3-C10 cycloalkynyl, (un) substituted C3-C10 cycloalkoxy, cyano, C1-C10 alkoxy, C2-C10 alkenyloxy, C2-C10 alkynyloxy, benzyloxy, (un) substituted amino, (un) substituted amido, O(CF3), C(O)O(R1), C(O)(R1), -SO2NR1R2, trifluoromethyl, aryl, aralkyl, heteroaryl and heteroaralkyl. R1 and R2 = H and (un)substituted alkyl; Q3 is (un)substituted alkyl; R11-R19 = H, hydroxy, halogen, (un)substituted alkyl, (un)substituted alkenyl, (un) substituted alkynyl, (un) substituted cycloalkyl, (un) substituted

cycloalkenyl, (un) substituted cycloalkynyl, cyano, alkoxy, alkenyloxy, alkynyloxy, benzyloxy, (un)substituted amino, (un)substituted amido, O(CF3), C(0)O(R41), -C(0)(R41), -SO2NR41R42, trifluoromethyl, aryl, aralkyl, heteroaryl and heteroaralkyl; R41 and R42 = H, (un)substituted alkyl, (un) substituted alkenyl, (un) substituted alkynyl, (un) substituted cycloalkyl, (un) substituted cycloalkenyl, (un) substituted cycloalkynyl, (un) substituted amino, trifluoromethyl, aryl, aralkyl, heteroaryl and heteroaralkyl; or R41 and R42 may be linked via a C2-C8 (un) substituted alkyl or alkenyl bridge where  $\geq 1$  carbons may be replaced by O, S or NR46. Q5 = -N(R20)C(0)(CR41R42)1-3-, 1-N(R20)C(0) cycloalkyl (ring size = 3-9), N(R20)C(0) -substituted azacycloalkyl; R20 and R46 = H, hydroxy, (un)substituted alkyl, (un) substituted alkenyl, (un) substituted alkynyl, (un) substituted cycloalkyl, optionally cycloalkenyl, (un) substituted cycloalkynyl, (un) substituted amino, (un) substituted amido, -C(0)O(R41), -C(0)(R41), -SO2NR4R42, trifluoromethyl, aryl, aralkyl, heteroaryl or heteroaralkyl; and Q6 = (un)substituted aromatic ring, (un) substituted nonarom. heterocycle, and (un) substituted heteroarom. ring; or R18 or R19 together with Q5Q6 and the atoms to which they are bonded form an (un) substituted nonarom. carbocyclic group, (un) substituted nonarom. heterocyclic group, (un)substituted aryl ring or (un)substituted heteroaryl ring. Addnl. details are given in the claims.

521975-55-3P, 4-[[1-[3-(2-Methoxyphenoxy)benzyl]piperidin-4-yl]carbamoyl]-4-phenylpiperidine-1-carboxylic acid tert-butyl ester 521975-85-9P, 4-[[1-[3-(2-Chlorophenoxy)benzyl]piperidin-4-yl]carbamoyl]-4-phenylpiperidine-1-carboxylic acid tert-butyl ester RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate; preparation of compds. as C-C chemokine receptor 8 antagonists, pharmaceutical compns. and use against inflammatory or viral disorders)

RN 521975-55-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[1-[[3-(2-methoxyphenoxy)phenyl]methyl]-4-piperidinyl]amino]carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\mathsf{t} - \mathsf{BuO} - \overset{\bigcirc}{\mathsf{C}} \\ \underset{Ph}{\overset{\bigcirc}{\mathsf{N}}} \\ \overset{\bigcirc}{\mathsf{C}} = \mathsf{NH} \\ \overset{\bigcirc}{\mathsf{N}} \\ \overset{\bigcirc}{\mathsf{C}} \\ \mathsf{NH} \\ \overset{\bigcirc}{\mathsf{N}} \\ \overset{\bigcirc}{\mathsf{C}} \\ \mathsf{NH} \\ \overset{\bigcirc}{\mathsf{N}} \\ \overset{\bigcirc}{\mathsf{C}} \\ \mathsf{NH} \\ \overset{\bigcirc}{\mathsf{N}} \\ \overset{\longrightarrow}{\mathsf{N}} \\$$

RN 521975-85-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[1-[[3-(2-chlorophenoxy)phenyl]methyl]-4-piperidinyl]amino]carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

IT 521976-34-1P, 4-Phenylpiperidine-1,4-dicarboxylic acid
4-[1-[3-(2-chlorophenoxy)benzyl]piperidin-4-yl]amide 1-ethylamide
dihydrochloride 521976-35-2P, 4-[[1-[3-(2Chlorophenoxy)benzyl]piperidin-4-yl]carbamoyl]-4-phenylpiperidine-1carboxylic acid ethyl ester dihydrochloride 521976-36-3P,
1-(2-Cyclopentylacetyl)-4-phenylpiperidine-4-carboxylic acid
[1-[3-(2-methoxyphenoxy)benzyl]piperidin-4-yl]amide dihydrochloride
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(drug candidate; preparation of compds. as C-C chemokine receptor 8 antagonists, pharmaceutical compns. and use against inflammatory or viral disorders)

RN 521976-34-1 CAPLUS

CN 1,4-Piperidinedicarboxamide, N4-[1-[[3-(2-chlorophenoxy)phenyl]methyl]-4-piperidinyl]-N1-ethyl-4-phenyl-, hydrochloride (1:2) (CA INDEX NAME)

EtNH 
$$\stackrel{\circ}{\mathbb{C}}$$
  $\stackrel{\circ}{\mathbb{C}}$   $\stackrel{\mathbb{C}}$   $\stackrel{\circ}{\mathbb{C}}$   $\stackrel{\mathbb{C}}$   $\stackrel{\circ}{\mathbb{C}}$   $\stackrel{\circ}{\mathbb{C}}$   $\stackrel{\circ}{\mathbb{C}}$   $\stackrel{\circ}{\mathbb{C}}$   $\stackrel{\circ}{\mathbb{C}}$   $\stackrel{\circ}{\mathbb{C}}$   $\stackrel{\circ}{\mathbb{C}}$   $\stackrel{\circ}{\mathbb{C}}$   $\stackrel{\circ}{\mathbb{C}}$   $\stackrel{\circ}$ 

RN 521976-35-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[1-[[3-(2-chlorophenoxy)phenyl]methyl]-4-piperidinyl]amino]carbonyl]-4-phenyl-, ethyl ester, hydrochloride (1:2) (CA INDEX NAME)

●2 HCl

RN 521976-36-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-(2-cyclopentylacetyl)-N-[1-[[3-(2-methoxyphenoxy)phenyl]methyl]-4-piperidinyl]-4-phenyl-, hydrochloride (1:2) (CA INDEX NAME)

●2 HC1

L3 ANSWER 47 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:301040 CAPLUS Full-text

DOCUMENT NUMBER: 138:321135

TITLE: Preparation of N-(piperidin-4-ylcarbonyl)

acylsulfonamides as inhibitors of steroid sulfatase INVENTOR(S): Horvath, Amarylla; Lehr, Philipp; Nussbaumer, Peter;

Schreiner, Erwin Paul

PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma G.m.b.H.

SOURCE: PCT Int. Appl., 126 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA.	PATENT NO.					D	DATE			APP	LIC.	AT]	ON I	NO.		D	ATE	
WO	2003	0313	 97		A1	_	2003	0417	1	 WO	200	 2-Е	EP11:	 140		2	0021	004
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BE	3, B	G,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, E	Ε,	ES,	FΙ,	GB,	GD,	GE,	GH,
		HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG	, K	Ρ,	KR,	KΖ,	LC,	LK,	LT,	LU,
		LV,	MA,	MD,	MK,	MN,	MX,	NO,	NZ,	OM.	1, P	Η,	PL,	PT,	RO,	RU,	SE,	SG,
		SI,	SK,	ТJ,	TM,	TN,	TR,	TT,	UA,	US	s, U	Z,	VC,	VN,	YU,	ZA,	ZW	
	RW:	AM,	AZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM.	1, A	Τ,	BE,	BG,	CH,	CY,	CZ,	DE,
		DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	ΙΊ	, L	U,	MC,	NL,	PT,	SE,	SK,	TR
CA	2458	453			A1		2003	0417	(	CA	200	2-2	2458	453		2	0021	004
AU	2002	3504	90		A1		2003	0422		AU	200	2-3	35049	90		2	0021	004
AU	2002	3504	90		В2		2006	0727										
EP	1436	253			A1		2004	0714		EΡ	200	2-7	7851	59		2	0021	004
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	₹, I	Τ,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑL	., T	R,	BG,	CZ,	EE,	SK		
BR	2002	0131	31		Α		2004	0921		BR	200	2-1	1313	1		2	0021	004
HU	2004	0016	87		A2													
CN	1564	811			Α		2005	0112	(	CN	200	2-8	3197	57		2	0021	004
JP	2005 5320	5048	43		Τ		2005	0217		JΡ	200	3-5	5343	81		2	0021	004
ΝZ	5320	72			Α			0223									0021	
RU	2320	643			C2		2008	0327		RU	200	4 - 1	1142	44		2	0021	004
	2004						2004	1119									0040	
	2004						2004	0305									0040	
MX	2004	PA03						0723									0040	405
	2004				Α			0113						2			0040	
	2005				A1		2005	0317						64			0041	
ORIT	Y APP	LN.	INFO	.:													0011	
									(	GB	200	1 - 2	2402	8		A 2	0011	005

GB	2001-24839	Α	20011016
GB	2001-27173	A	20011112
GB	2001-27174	A	20011112
GB	2001-27343	A	20011114
GB	2002-11524	A	20020520
WO	2002-EP11140	W	20021004

OTHER SOURCE(S): MARPAT 138:321135

The title compds. with general formula of R1-(CH2)m-SO2NHCO-(CH2)n-R2 [wherein R1 = haloalkyl, (un)substituted alkenyl, thienyl, Py, benzothiazolyl, chromanyl, or aryl; R2 = (un)substituted alkenyl, alkyl, cyclyl, bicyclyl, or tricyclyl, etc.; m and n = independently 0-4; with exclusions] are prepared as inhibitors of steroid sulfatase. For example, 4-bromo-2,5-dichlorothiophene-3-sulfonyl chloride was treated with aqueous NH3 in AcOEt to give 4-bromo-2,5-dichlorothiophene-3-sulfonamide. The sulfonamide was reacted with 1-(tert-butoxycarbonyl)piperidine-4- carboxylic acid in DMF in the presence of DMAP, DIEA, and EDC to afford 4-(4-bromo-2,5-dichlorothiophene-3-sulfonylaminocarbonyl)piperidine-1- carboxylic acid tert-Bu ester. The invention compds. showed IC50 of 0.0046 to 0.29  $\mu$ M against human steroid sulfatase.

IT 512819-37-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(steroid sulfatase inhibitor; preparation of N-(piperidinylcarbonyl) acylsulfonamides as inhibitors of steroid sulfatase)

RN 512819-37-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[[3,5-bis(trifluoromethyl)phenyl]sulfonyl]amino]carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 48 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:215718 CAPLUS Full-text

DOCUMENT NUMBER: 139:94763

TITLE: Benzamide derivatives as blockers of Kv1.3 ion channel AUTHOR(S): Miao, Shouwu; Bao, Jianming; Garcia, Maria L.; Goulet, Joung L.; Hong, Xingfang J.; Kaczorowski, Gregory J.;

Kayser, Frank; Koo, Gloria C.; Kotliar, Andrew; Schmalhofer, William A.; Shah, Kashmira; Sinclair, Peter J.; Slaughter, Robert S.; Springer, Marty S.; Staruch, Mary Jo; Tsou, Nancy N.; Wong, Frederick;

Parsons, William H.; Rupprecht, Kathleen M.

CORPORATE SOURCE: Department of Medicinal Chemistry, Merck Research

Laboratories, Rahway, NJ, 07065, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2003),

13(6), 1161-1164

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:94763

The voltage-gated potassium channel, Kv1.3, is present in human T-lymphocytes. Blockade of Kv1.3 results in T-cell depolarization, inhibition of T-cell activation, and attenuation of immune responses in vivo. A class of benzamide Kv1.3 channel inhibitors has been identified. The structure-activity relationship within this class of compds. in two functional assays, Rb\_Kv and T-cell proliferation, is presented. In in vitro assays, trans isomers display moderate selectivity for binding to Kv1.3 over other Kv1.x channels present in human brain.

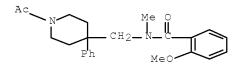
IT 558437-84-6

RL: PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study)

(preparation of benzamide derivs. as blockers of Kv1.3 ion channel)

RN 558437-84-6 CAPLUS

CN Benzamide, N-[(1-acetyl-4-phenyl-4-piperidinyl)methyl]-2-methoxy-N-methyl-(CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 49 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2003:58220 CAPLUS Full-text

DOCUMENT NUMBER: 138:117676

TITLE: Linear and cyclic melanocortin receptor-specific

peptides, and therapeutic use

INVENTOR(S): Sharma, Shubh D.; Shadiack, Annette M.; Yang, Wei;

Rajpurohit, Ramesh

PATENT ASSIGNEE(S): Palatin Technologies, Inc., USA

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PAT	PATENT NO.					D	DATE		APPLICATION NO.						DATE		
	2003 2003				A2 A3		2003 2003		,	WO 2	002-	 US22	196		20020711		
	₩:	CO, GM, LS, RO,	CR, HR, LT, RU,	CU, HU, LU,	CZ, ID, LV, SE,	DE, IL, MA, SG,	AU, DK, IN, MD, SI,	DM, IS, MG,	DZ, JP, MK,	EC, KE, MN,	EE, KG, MW,	ES, KP, MX,	FI, KR, MZ,	GB, KZ, NO,	GD, LC, NZ,	GE, LK, PL,	GH, LR, PT,
	RW:	GH,	GM,	KE,	LS,	MW,	MZ, TM,										

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FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
             CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2453515
                                20030123
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     AU 2002322466
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                                             AU 2002-322466
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     AU 2002322466
                          A2
                                 20030129
     AU 2002322466
                          В2
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     EP 1441750
                          Α2
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                                                                     20020711
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     JP 2004534851
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                                20041118
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                                                                     20020711
                                             US 2003-638071
     US 20040138136
                                20040715
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     US 7342089
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     US 20060014194
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     US 7345144
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     US 20060111281
                          Α1
                                20060525
                                             US 2005-269271
                                                                    20051109
PRIORITY APPLN. INFO.:
                                             US 2001-304836P
                                                                 Ρ
                                                                    20010711
                                             US 1999-142346P
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                                             US 2000-194987P
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                                             US 2000-606501
                                                                 A2 20000628
                                             US 2002-40547
                                                                 A2 20020104
                                             WO 2002-US22196
                                                                 W 20020711
                                             US 2003-638071
                                                                 A2 20030808
                                             US 2004-585971P
                                                                 P 20040706
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OTHER SOURCE(S): MARPAT 138:117676

AB Linear and cyclic peptides are provided which are specific to melanocortin receptors and which exhibit agonist, antagonist, or mixed agonist-antagonist activity. The peptides of the invention may be used to treat e.g. erectile dysfunction and eating disorders.

IT 488790-46-1

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(linear and cyclic melanocortin receptor-specific peptides, and therapeutic use)

RN 488790-46-1 CAPLUS

CN D-Phenylalaninamide, N-(7-amino-1-oxoheptyl)-O-(phenylmethyl)-L-seryl-N[(1S)-1-[[4-(aminocarbonyl)-4-phenyl-1-piperidinyl]carbonyl]-4[(aminoiminomethyl)amino]butyl]-4-chloro- (9CI) (CA INDEX NAME)

ACCESSION NUMBER: 2002:813930 CAPLUS Full-text

DOCUMENT NUMBER: 137:325334

TITLE: Preparation of aryl and biaryl piperidines as MCH

antagonists

INVENTOR(S): Hobbs, Douglas W.; Guo, Tao; Hunter, Rachael C.; Gu,

Huizhong; Babu, Suresh D.; Shao, Yuefei

PATENT ASSIGNEE(S): Pharmacopeia, Inc., USA SOURCE: PCT Int. Appl., 113 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.					KIND DATE			APPLICATION NO.						DATE			
WC	2002	0831	34		A1	_	2002	1024		 WO 2	002-	 US11	 296		2	0020	410	
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		CO,	CR,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	HR,	HU,	
		ID,	IL,	IN,	IS,	JP,	KG,	KR,	KΖ,	LC,	LK,	LR,	LT,	LU,	LV,	MA,	MD,	
		MG,	MK,	MN,	MX,	MZ,	NO,	NZ,	PH,	PL,	PT,	RO,	RU,	SE,	SG,	SI,	SK,	
		SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UΖ,	VN,	YU,	ZA,	ZM				
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	CH,	
		CY,	DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	${ m ML}$ ,	MR,	ΝE,	SN,	TD,	ΤG	
CA	2443	672			A1		2002	1024		CA 2	002-	2443	672		2	0020	410	
AU	2002	3032	99		A1		2002	1028		AU 2	002-	3032	99		2	0020	410	
US	2003	0013	720		A1		2003	0116		US 2	002-	1200	80		2	0020	410	
US	6887	889			В2		2005	0503										
EP	1377	293			A1		2004	0107		EP 2	002-	7313	18		2	0020	410	
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,	
			•	•	•		RO,	•	,									
JP	2004	5267	61		Τ		2004	0902		JP 2	002-	5809.	38		2	0020	410	
	2003				А		2004	0212								0031		
PRIORIT	ORITY APPLN. INFO.:			.:						US 2	001-	2835.	23P	]	P 2	0010	412	
										WO 2	002-	US11	296	Ī	W 2	0020	410	
THER 9	SOURCE(S).					ידעכ	137.	2252	3./1									

OTHER SOURCE(S): MARPAT 137:325334

GΙ

AB The title compds. [I; Ar1 = (un)substituted Ph, pyridyl, pyrimidyl, etc.; Z = R4, COR4, SO2R4, etc.; R2 = H, alkyl, alkyl substituted with cycloalkyl; R3 = H, alkyl, cycloalkyl, etc.; R4 = Ph, phenylalkyl], useful for treatment,

prevention or amelioration of one or more of diseases associated with the MCH receptor, were prepared E.g., a 7-step synthesis of II, starting from 3,4-difluorophenyl isocyanate, which showed Ki of 11-100 nM against MCH, was given. This invention provides also pharmaceutical compns. containing one or more of the compds. I for treatment of eating disorders.

IT 473736-79-7P 473736-80-0P 473736-82-2P 473736-84-4P 473736-85-5P 473736-86-6P 473736-87-7P 473736-88-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aryl and biaryl piperidines as MCH antagonists)  $473736-79-7\ \mbox{CAPLUS}$ 

1-Piperidinecarboxamide, 4-[4-(1,3-benzodioxol-5-yl)phenyl]-4-[[(cyclopropylmethyl)amino]methyl]-N-(3,5-dichlorophenyl)- (CA INDEX NAME)

RN 473736-80-0 CAPLUS

RN

CN

CN 1-Piperidinecarboxamide, 4-[[bis(cyclopropylmethyl)amino]methyl]-4-(3'-chloro[1,1'-biphenyl]-4-yl)-N-(3,5-dichlorophenyl)- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 473736-82-2 CAPLUS

CN 1-Piperidinecarboxamide, 4-(3'-chloro[1,1'-biphenyl]-4-yl)-4[[(cyclopropylmethyl)amino]methyl]-N-(3,5-dichlorophenyl)- (CA INDEX NAME)

$$CH_2$$
—  $NH$ —  $CH_2$ —  $NH$ —  $CH_2$ —  $NH$ —  $CH_2$ —  $CH$ 

RN 473736-84-4 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[bis(cyclopropylmethyl)amino]methyl]-4-(3'-cyano[1,1'-biphenyl]-4-yl)-N-(3,5-dichlorophenyl)- (CA INDEX NAME)

RN 473736-85-5 CAPLUS

CN 1-Piperidinecarboxamide, 4-(3'-cyano[1,1'-biphenyl]-4-yl)-4[[(cyclopropylmethyl)amino]methyl]-N-(3,5-dichlorophenyl)- (CA INDEX NAME)

RN 473736-86-6 CAPLUS

CN 1-Piperidinecarboxamide, 4-[4-(1,3-benzodioxol-5-yl)phenyl]-4[[bis(cyclopropylmethyl)amino]methyl]-N-(3,5-dichlorophenyl)- (CA INDEX NAME)

RN 473736-87-7 CAPLUS

CN 1-Piperidinecarboxamide, 4-(3'-cyano[1,1'-biphenyl]-4-yl)-N-(3,5-dichlorophenyl)-4-[(dipropylamino)methyl]- (CA INDEX NAME)

RN 473736-88-8 CAPLUS

CN 1-Piperidinecarboxamide, 4-(3'-cyano[1,1'-biphenyl]-4-yl)-N-(3,5-dichlorophenyl)-4-[(propylamino)methyl]- (CA INDEX NAME)

IT 473735-52-3P 473736-97-9P 473737-03-0P 473737-06-3P 473737-14-3P 473737-15-4P

473737-17-6P 473737-19-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of aryl and biaryl piperidines as MCH antagonists)

RN 473735-52-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(4-iodophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 473736-97-9 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[2-(3,5-difluorophenyl)acetyl]amino]methy 1]-4-(4-iodophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & &$$

RN 473737-03-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(3-chloro-4-fluorophenyl)sulfonyl]amino]methyl]-4-(4-iodophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & &$$

RN 473737-06-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-iodophenyl)-4-[[[(2-methylpropoxy)carbonyl]amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 473737-14-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-iodophenyl)-4-[[(2,2,2-trifluoroacetyl)amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 473737-15-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-iodophenyl)-4-[[methyl(2,2,2-trifluoroacetyl)amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 473737-17-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-iodophenyl)-4-[(methylamino)methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 473737-19-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[[(3,5-dichlorophenyl)amino]carbonyl]meth ylamino]methyl]-4-(4-iodophenyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 51 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:793427 CAPLUS  $\underline{\text{Full-text}}$ 

DOCUMENT NUMBER: 137:310932

 ${\tt TITLE:} \qquad \qquad {\tt Preparation \ of \ N-substituted \ nonaryl \ heterocyclyl}$ 

amides as NMDA/NR2B antagonists for relieving pain

INVENTOR(S): Liverton, Nigel J.; Butcher, John W.; McIntyre,

Charles J.; Claiborne, Christopher F.; Claremon, David A.; McCauley, James A.; Romano, Joseph J.; Thompson,

Wayne; Munson, Peter M. Merck & Co., Inc., USA

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 270 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.						DATE		APPLICATION NO.								
WO	2002	0809	28		 A1										2	0020	402
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
							IN,										
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	PL,
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,
		UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW	·		·	·	·	•	·	·
	RW:	GH,	GM,	KE,	LS,	MW,	MΖ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,
							FR,										
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG
CA	2443	108	•	•	A1	·	2002	1017	·	CA 2	002-	2443	108	·	2	0020	402
AU	2002	3383.	34		A1		2002	1021		AU 2	002-	3383.	34		2	0020	402
US	2003	0119	811		A1		2003	0626		US 2	002-	1146	85		2	0020	402
US	7259	157			В2		2007	0821									
EP	1390	034			A1		2004	0225		EP 2	002-	7638	96		2	0020	402
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
							RO,					·	·	·	·	·	·
JP	2005											5789	67		2	0020	402
PRIORIT	RITY APPLN. INFO.:			.:				US 2001-281166P			66P	P 20010403					
										WO 2	002-	US10	269	Ţ	W 2	0020	402
ס מחודים כ	OLIDOD	/ C ) .			MADI	ייי ע רי	137.	21001	2.0								

OTHER SOURCE(S): MARPAT 137:310932

GΙ

The title compds. [I; NonAr = nonarom. 5-7 membered containing heteroatoms; A AΒ = (un)substituted Ph, pyrrolyl, imidazolyl, etc.; B = aryl(CH2)0-3(CH2)0- 2CO, heteroary1(CH2)1-30(CH2)0-2CO, etc.; X = H, OH, F, etc.] which are effective as NMDA NR2B antagonists useful for relieving pain, were prepared E.g., a 2step synthesis of II, starting with 4-aminomethylpiperidine, was given. The compds. I exhibit IC50's of less than 50  $\mu M$  in the FLIPR and binding assays, and thus they have been found to exhibit biol. activity as NMDA NR2B antagonists.

ΙT 471250-87-0P

> RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of N-substituted nonaryl heterocyclyl amides as NMDA/NR2B antagonists for relieving pain)

471250-87-0 CAPLUS RN

1-Piperidinecarboxylic acid, 4-[[(4-hydroxybenzoyl)amino]methyl]-4-phenyl-CN , phenylmethyl ester (CA INDEX NAME)

REFERENCE COUNT: THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 52 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:695975 CAPLUS Full-text

DOCUMENT NUMBER: 137:232913

TITLE: Preparation of peptides for pharmaceutical use as

modulators of melanocortin receptors

INVENTOR(S): Yu, Guixue; Macor, John; Herpin, Timothy; Lawrence, R.

Michael; Morton, George C.; Ruel, Rejean; Poindexter,

Graham S.; Ruediger, Edward H.; Thibault, Carl

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 107 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

									APPLICATION NO.								
											2002-						
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	В	в, вG,	BR,	BY,	BZ,	CA	, СН,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	. E(	C, EE,	ES,	FΙ,	GB,	GD	, GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	K	Ξ, KG,	KΡ,	KR,	KΖ,	LC	, LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	, Mi	N, MW,	MX,	MZ,	NO,	ΝZ	, OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SI	K, SL,	ΤJ,	TM,	TN,	TR	, TT,	TZ,
		UA,	UG,	US,	UΖ,	VN,	YU,	ZA,	ZM,	. ZV	N						
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	S	Z, TZ,	UG,	ZM,	ZW,	ΑT	, BE,	CH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	. II	Ξ, ΙΤ,	LU,	MC,	NL,	PΤ	, SE,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	, G(	Q, GW,	ML,	MR,	NE,	SN	, TD,	ΤG
											2002-						
AU	2002	2540	95		A1		2002	0919		AU	2002-	2540	95			20020	302
EP	1363	898			A1		2003	1126		ΕP	2002-	7233	10			20020	302
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	, GI	R, IT,	LI,	LU,	NL,	SE	, MC,	PT,
		ΙE,	SI,	LT,	LV,						L, TR						
	2004						2004	1228		HU	2004-	1544				20020	302
	2005										2002-					20020	302
	2003						2003	0515		US	2002-	9058	2			20020	304
US	6979	691			В2		2005	1227									
US	2003	0096					2003	0522		US	2002-	9028	8			20020	304
	6713				В2		2004	0330									
US	2004						2004			US	2003-	6967	61			20031	029
US	7067	525			В2		2006	0627									
	2006				A1		2006	0202			2005-					20050	
PRIORIT	Y APP	LN.	INFO	.:							2001-					20010	302
										US	2001-	2732	91P		P	20010	302
											2002-					20020	
										US	2002-	9028	8		А3	20020	304
										US	2002-	9058	2		А3	20020	304
OTHER S	OURCE	(S):			MAR	PAT	137:	23291	13								

GΙ

AB Compds. W-(CR6R7)yCH(G)(CR4R5)xCO-X(R1)CHR2(CHR3)r(CH2)sCO-E [X = N or CH; R1, R3 = H or alkyl; R2 = H, aryl, cycloalkyl, heteroaryl, heterocyclyl, (un) substituted alkyl or alkenyl; R1 together with R2 or R3 or R2 together with R3 form mono- or bicyclic aryl, cycloalkyl, heteroaryl, or heterocyclyl; E = (un)substituted pyrrolidino, piperidino, hexahydro-1-azepinyl, 1piperazinyl, cyclopentyl, cyclohexyl, cycloheptyl, amino, (cyclo)alkylamino; R4-R6 = H, (un)substituted alkyl, amino, alkylamino, hydroxy, alkoxy, aryl, cycloalkyl, heteroaryl, or heterocyclyl; or CR4R5 or C6R7 is a spirocycloalkyl ring; r, s = 0 or 1; x = 0-4; y = 0-2; G = alkenyl, arylalkenyl, hydroxy, heteroaryl, cyano, functionalized alkyl or alkenyl, etc.; W = amino, alkylamino, hydroxy, alkoxy, carbamoyl, amidino, cycloalkyl, heteroaryl,

heterocyclyl, etc.] were prepared as modulators of melanocortin receptors, particularly MC-1R and MC-4R. Thus, peptide I was prepared by a solutionphase peptide coupling/deprotection scheme.

ΤТ 457903-94-5P

> RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of peptides for pharmaceutical use as modulators of melanocortin receptors)

457903-94-5 CAPLUS RN

CN 1H-Imidazole-4-propanamide,  $\alpha$ -(acetylamino)-N-[(1S)-2-[4-[(acetylamino)methyl]-4-phenyl-1-piperidinyl]-1-[(4-methoxyphenyl)methyl]-2-oxoethyl]-,  $(\alpha S)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 53 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN T.3 ACCESSION NUMBER: 2002:675992 CAPLUS Full-text

DOCUMENT NUMBER: 137:216873

TITLE: Acylated piperidine derivatives, specifically

1-(pyrrolidinylcarbonyl)piperidines,

1-(piperidinylcarbonyl)piperidines, and analogs, as

melanocortin-4 receptor agonists, and their pharmaceutical compositions and therapeutic uses

INVENTOR(S): Goulet, Mark T.; Nargund, Ravi P.; Sebhat, Iyassu K.;

Ujjainwalla, Feroze; Walsh, Thomas F.; Warner, Daniel;

Young, Jonathan R.; Bakshi, Raman K. Merck & Co., Inc., USA; Ye, Zhixiong

PCT Int. Appl., 138 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT NO.	KIND DATE	E APPL	ICATION NO.	DATE		
WO 2002068387	A2 2002	20906 WO 2	002-US5623	20020225		
WO 2002068387	A3 2000	30220				
W: AE, AG, AL,	AM, AT, AU,	, AZ, BA, BB,	BG, BR, BY, BZ,	CA, CH, CN,		
CO, CR, CU,	CZ, DE, DK,	DM, DZ, EC,	EE, ES, FI, GB,	GD, GE, GH,		
GM, HR, HU,	ID, IL, IN,	, IS, JP, KE,	KG, KR, KZ, LC,	LK, LR, LS,		
LT, LU, LV,	MA, MD, MG,	, MK, MN, MW,	MX, MZ, NO, NZ,	OM, PH, PL,		
PT, RO, RU,	SD, SE, SG,	, SI, SK, SL,	TJ, TM, TN, TR,	TT, TZ, UA,		
UG. US. UZ.	VN. YU. ZA.	. ZM. ZW				

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
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              GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,
              GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2439149
                                   20020906
                                               CA 2002-2439149
                                                                         20020225
                            Α1
     AU 2002255597
                            Α1
                                   20020912
                                                AU 2002-255597
                                                                         20020225
     AU 2002255597
                            В2
                                   20060302
     EP 1372653
                            A2
                                                EP 2002-725001
                                   20040102
                                                                         20020225
     EP 1372653
                            В1
                                   20061004
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2004527498
                           Τ
                                   20040909
                                                JP 2002-567901
                                                                         20020225
     AT 341327
                            Τ
                                   20061015
                                                AT 2002-725001
                                                                         20020225
     ES 2272703
                           Т3
                                   20070501
                                               ES 2002-725001
                                                                         20020225
                                               ZA 2003-6160
     ZA 2003006160
                          A
                                  20040721
                                                                         20030808
     US 20040097546
                          A1
                                  20040520
                                               US 2003-468515
                                                                         20030819
     US 7015235
                          B2 20060321
                           A1 20060216
A 20080703
     US 20060035935
                                                US 2005-239721
                                                                         20050930
                           A
     JP 2008150394
                                   20080703
                                                JP 2008-26028
                                                                         20080206
                                                US 2001-272258P P 20010228

US 2001-300572P P 20010622

US 2001-300118P P 20010622

JP 2002-567902 A3 20020225

WO 2002-US5623 W 20020225

US 2003-468515 A3 20030819
PRIORITY APPLN. INFO.:
OTHER SOURCE(S): MARPAT 137:216873
GΙ
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## \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

- AΒ Certain novel 4-substituted N-acylated piperidine derivs., specifically I, are agonists of the human melanocortin receptor(s) and, in particular, are selective agonists of the human melanocortin-4 receptor (MC-4R) [wherein: p = 1 or 2; q = 0, 1, or 2; n = 0, 1, or 2; R1 = H, amidino, alkyliminoyl, (un) substituted alkyl, (CH2) n-G1 [G1 = (un) substituted cycloalkyl, Ph, naphthyl, or heteroaryl]; R2 = (un)substituted Ph, naphthyl, or heteroaryl; X = alkyl, (CH2)n-G2 [G2 = (un)substituted cycloalkyl, Ph, naphthyl, heteroaryl, heterocyclyl, cyano, CONH2, CO2H, OH, NH2, and various derivs.]; Y = (un) substituted alkyl, alkenyl, (CH2) n-G3 [G3 = (un) substituted cycloalkyl, Ph, naphthyl, heteroaryl, or heterocyclyl]; including pharmaceutically acceptable salts]. They are therefore useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity, diabetes, sexual dysfunction, including erectile dysfunction and female sexual dysfunction. Approx. 200 invention compds. I and approx. 80 intermediates were prepared For instance, amidation of (±)-trans-1-(tertbutoxycarbonyl)-3-(4- fluorophenyl)piperidine-4-carboxylic acid with 4cyclohexyl-4-[(4,4- dimethyl-2-oxo-1,3-oxazolidin-3-yl)methyl]piperidine HCl, followed by N-deprotection with removal of BOC using HCl, and reductive Nmethylation using paraformaldehyde and NaBH3CN, gave title compound (±)-trans-II, isolated as the trifluoroacetate salt. Representative compds. I bound to cloned human MC-4R in vitro with IC50 values generally below 2  $\mu M$ , and also acted as agonists toward cloned human MCR in a functional assay with EC50 values less than 1  $\mu M$ .
- IT 455953-07-8P, (3R,4R)-4-[[4-[(tert-Butylamino)carbonyl]-4-(2-fluorophenyl)piperidin-1-yl]carbonyl]-3-(4-fluorophenyl)piperidinium chloride 455953-15-8P 455953-16-9P 455953-21-6P 455953-22-7P 455953-23-8P

Absolute stereochemistry.

RN 455953-15-8 CAPLUS
CN 4-Piperidinecarboxamide, N-(1,1-dimethylethyl)-1-[[(3S,4S)-3-(4-fluorophenyl)-4-piperidinyl]carbonyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

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RN 455953-16-9 CAPLUS
CN 4-Piperidinecarboxamide, 1-[[(3R,4R)-3-(4-chlorophenyl)-4-
piperidinyl]carbonyl]-N-(1,1-dimethylethyl)-4-(2-fluorophenyl)-, rel- (CA
INDEX NAME)
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Relative stereochemistry.

RN 455953-21-6 CAPLUS

CN 4-Piperidinecarboxamide, N-(1,1-dimethylethyl)-1-[[(3R,4R)-3-(4-fluorophenyl)-4-piperidinyl]carbonyl]-4-(4-iodophenyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 455953-22-7 CAPLUS

CN 4-Piperidinecarboxamide, 1-[[(3R,4R)-3-(4-chlorophenyl)-4-piperidinyl]-N-(1,1-dimethylethyl)-4-(4-iodophenyl)-, rel- (CA INDEX NAME)

Relative stereochemistry.

RN 455953-23-8 CAPLUS

CN 4-Piperidinecarboxamide, N-(1,1-dimethylethyl)-1-[[(3R,4R)-3-(4-fluorophenyl)-4-piperidinyl]carbonyl]-4-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 455953-24-9 CAPLUS
CN 4-Piperidinecarboxamide, 1-[[(3R,4R)-3-(4-chlorophenyl)-4-piperidinyl]carbonyl]-N-(1,1-dimethylethyl)-4-[4-(trifluoromethyl)phenyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.

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RN 455953-25-0 CAPLUS
CN 4-Piperidinecarboxamide, 4-(4-chlorophenyl)-N-(1,1-dimethylethyl)-1-
[[(3R,4R)-3-(4-fluorophenyl)-4-piperidinyl]carbonyl]- (CA INDEX NAME)
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RN 455953-26-1 CAPLUS

CN 4-Piperidinecarboxamide, 4-(4-chlorophenyl)-1-[[(3R,4R)-3-(4-chlorophenyl)-4-piperidinyl]carbonyl]-N-(1,1-dimethylethyl)-, rel- (CA INDEX NAME)

Relative stereochemistry.

RN 455953-27-2 CAPLUS

CN 4-Piperidinecarboxamide, 4-(3,4-difluorophenyl)-N-(1,1-dimethylethyl)-1- [[(3R,4R)-3-(4-fluorophenyl)-4-piperidinyl]carbonyl]- (CA INDEX NAME)

RN 455953-28-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-[[(3R,4R)-3-(4-chlorophenyl)-4-piperidinyl]carbonyl]-4-(3,4-difluorophenyl)-N-(1,1-dimethylethyl)-, rel-(CA INDEX NAME)

Relative stereochemistry.

RN 455953-29-4 CAPLUS

CN 4-Piperidinecarboxamide, 4-(3-chlorophenyl)-N-(1,1-dimethylethyl)-1- [[(3R,4R)-3-(4-fluorophenyl)-4-piperidinyl]carbonyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 455953-30-7 CAPLUS

CN Propanamide, N-[[4-(2,4-dichlorophenyl)-1-[[(3R,4R)-3-(4-fluorophenyl)-4-piperidinyl]carbonyl]-4-piperidinyl]methyl]-2,2-dimethyl-, rel- (CA INDEX NAME)

Relative stereochemistry.

RN 455953-31-8 CAPLUS

CN Propanamide, N-[[1-[[(3R,4R)-3-(4-fluorophenyl)-4-piperidinyl]carbonyl]-4-(3-methoxyphenyl)-4-piperidinyl]methyl]-2,2-dimethyl-, rel- (CA INDEX NAME)

Relative stereochemistry.

L3 ANSWER 54 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:551566 CAPLUS Full-text

DOCUMENT NUMBER: 137:119637

TITLE: Compositions and methods for inhibiting fungal growth INVENTOR(S): Bergnes, Gustave; Berlin, Vivian; Come, Jon; Kluge,

Arthur; Murthi, Krishna; Pal, Kollol

PATENT ASSIGNEE(S): GPC Biotech Inc., USA

SOURCE: U.S., 115 pp., Cont.-in-part of U.S. Ser. No. 115,846.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6423519	B1	20020723	US 1998-172845	19981015
CA 2335381	A1	20000127	CA 1999-2335381	19990715

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WO 2000003743
                        A2
                               20000127 WO 1999-US16146
                                                                  19990715
    WO 2000003743
                         АЗ
                               20010201
        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
            DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
            JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
            MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
            TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
            ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
            CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    AU 9951075
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                                                                  19990715
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                                          EP 1999-935639
    EP 1096925
                         Α2
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                                                                  19990715
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             IE, SI, LT, LV, FI, RO
                        Τ
                               20020709
                                           JP 2000-559877
    JP 2002520372
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PRIORITY APPLN. INFO.:
                                           US 1998-115846
                                                               B2 19980715
                                           US 1998-172845
                                                               A 19981015
                                                              W 19990715
                                           WO 1999-US16146
OTHER SOURCE(S):
                        MARPAT 137:119637
     The present invention relates to compns. and methods for inhibiting fungal
     growth. The present invention relates to methods for treating or preventing
     fungal infections and infections involving other eukaryotic parasites of
     plants or animals, using compds. that specifically inhibit the biol. activity
     of the enzyme protein geranylgeranyltransferase (GGPTase). The inhibitors of
     fungal GGPTase which are anti-fungal agents may be peptides, peptidomimetics,
     or non-peptides.
    256367-55-2P 256367-56-3P 256367-57-4P
    256367-58-5P 256367-59-6P 256367-60-9P
    256367-61-0P 256367-62-1P 256367-64-3P
    256367-65-4P 256367-66-5P 256367-67-6P
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IT 256367-55-2P 256367-56-3P 256367-57-4P 256367-58-5P 256367-59-6P 256367-60-9P 256367-61-0P 256367-62-1P 256367-64-3P 256367-65-4P 256367-66-5P 256367-70-1P 256367-71-2P 256367-72-3P 256367-73-4P 256367-77-8P 256367-75-6P 256367-77-8P 256367-78-9P 256367-79-0P 256367-81-4P 256368-02-2P 256370-06-6P 256384-54-0P 443733-73-1P

RL: AGR (Agricultural use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(compns. and methods for inhibiting fungal growth using geranylgeranylproteintransferase inhibitors)

RN 256367-55-2 CAPLUS

CN L-Leucine, D-cysteinyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-([1,1'-biphenyl]-2-ylmethyl)-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-57-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-(3-methylbutyl)-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-58-5 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl-N-[2-(2-thienyl)ethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-59-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-([1,1'-biphenyl]-3-ylmethyl)-4-phenyl- (CA INDEX NAME)

RN 256367-60-9 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-[3-(4-morpholinyl)propyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-61-0 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl-N-[2-(1-pyrrolidinyl)ethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-62-1 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-(1H-benzimidazol-2-ylmethyl)-4-phenyl- (CA INDEX NAME)

RN 256367-64-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-[3-(1H-imidazol-1-yl)propyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

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RN 256367-65-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl-N-(4-pyridinylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-66-5 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-, ethyl ester (CA INDEX NAME)

RN 256367-67-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-[2-[4-(aminosulfonyl)phenyl]ethyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-68-7 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-[2-(2-naphthalenylamino)-2-oxoethyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-69-8 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl-N-[[3-(trifluoromethoxy)phenyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-70-1 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-(1,3-benzodioxol-5-ylmethyl)-4-phenyl- (CA INDEX NAME)

RN 256367-71-2 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-[(2,4-difluorophenyl)methyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-72-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-cyclohexyl-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-73-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl-N-[(tetrahydro-2-furanyl)methyl]- (CA INDEX NAME)

RN 256367-74-5 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-[(2-methoxyphenyl)methyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-75-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl-N-(2-phenylcyclopropyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-76-7 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-(1-naphthalenylmethyl)-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-77-8 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropy1]-N-[2-[[2-(2-chloro-6-fluorophenyl)ethyl]thio]ethyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-78-9 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-(2,2-diphenylethyl)-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-79-0 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-9H-fluoren-9-yl-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-80-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl-N-(4-phenylbutyl)- (CA INDEX NAME)

RN 256367-81-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl-N-(phenylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-94-9 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-3-amino-2-[[(2R)-2-amino-3-mercapto-1-oxopropyl]amino]-1-oxopropyl]-4-phenyl-N-(4-pyridinylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-00-0 CAPLUS

CN 4-Piperidinecarboxamide, 1-(L-alanyl-L-cysteinyl)-4-phenyl-N-(4-pyridinylmethyl)- (9CI) (CA INDEX NAME)

RN 256368-01-1 CAPLUS

CN L-Alaninamide, L-alanyl-N-[(1R)-1-(mercaptomethyl)-2-oxo-2-[4-phenyl-4-[[(4-pyridinylmethyl)amino]carbonyl]-1-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-02-2 CAPLUS

CN L-Alanine, L-cysteinyl-4-phenyl-4-piperidinecarbonyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256370-06-6 CAPLUS

CN L-Alanine, L-cysteinyl-4-phenyl-4-piperidinecarbonyl-L-leucyl-L-alanyl- (9CI) (CA INDEX NAME)

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-[(4-cyanocyclohexyl)methyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 443733-73-1 CAPLUS

CN 4-Piperidinecarboxamide, N-[(1S)-1-(aminocarbonyl)-3-methylbutyl]-1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

IT 256368-77-1 443733-77-5
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (compns. and methods for inhibiting fungal growth using geranylgeranylproteintransferase inhibitors)
RN 256368-77-1 CAPLUS
CN Carbamic acid, [(1R)-2-oxo-2-[4-phenyl-4-[[(4-pyridinylmethyl)amino]carbonyl]-1-piperidinyl]-1 [[(triphenylmethyl)thio]methyl]ethyl]-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 443733-77-5 CAPLUS

CN L-Leucine, N-[(1,1-dimethylethoxy)carbonyl]-S-(triphenylmethyl)-L-

cysteinyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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ΤТ
     256368-41-9P 256368-42-0P 256368-43-1P
     256368-44-2P 256368-45-3P 256368-46-4P
     256368-47-5P 256368-48-6P 256368-50-0P
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     256368-54-4P 256368-55-5P 256368-56-6P
     256368-57-7P 256368-58-8P 256368-59-9P
     256368-60-2P 256368-61-3P 256368-62-4P
     256368-63-5P 256368-64-6P 256368-65-7P
     256368-66-8P 256368-72-6P 256368-78-2P
     256384-55-1P 443733-72-0P 443733-76-4P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (compns. and methods for inhibiting fungal growth using
        geranylgeranylproteintransferase inhibitors)
     256368-41-9 CAPLUS
RN
CN
     L-Leucine, N-[(1,1-dimethylethoxy)carbonyl]-S-(triphenylmethyl)-D-
     cysteinyl-4-phenyl-4-piperidinecarbonyl-, methyl ester (9CI) (CA INDEX
     NAME)
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Absolute stereochemistry.

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RN 256368-42-0 CAPLUS
CN Carbamic acid, [(1S)-2-[4-[[([1,1'-biphenyl]-2-ylmethyl)amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)
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RN 256368-43-1 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[(3-methylbutyl)amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-44-2 CAPLUS

CN Carbamic acid, [(1S)-2-oxo-2-[4-phenyl-4-[[[2-(2-thienyl)ethyl]amino]carbonyl]-1-piperidinyl]-1[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-45-3 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[([1,1'-biphenyl]-3-ylmethyl)amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 256368-46-4 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[[3-(4-morpholinyl)propyl]amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-47-5 CAPLUS

CN Carbamic acid, [(1S)-2-oxo-2-[4-phenyl-4-[[[2-(1-pyrrolidinyl)ethyl]amino]carbonyl]-1-piperidinyl]-1[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CAINDEX NAME)

Absolute stereochemistry.

RN 256368-48-6 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[(1H-benzimidazol-2-ylmethyl)amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 256368-50-0 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[[3-(1H-imidazol-1-yl)propyl]amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-51-1 CAPLUS

CN Carbamic acid, [(1S)-2-oxo-2-[4-phenyl-4-[[(4-pyridinylmethyl)amino]carbonyl]-1-piperidinyl]-1[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-52-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[1-[(2S)-2-[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxo-3-[(triphenylmethyl)thio]propyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-, ethyl ester (CA INDEX NAME)

RN 256368-53-3 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[[2-[4-(aminosulfonyl)phenyl]ethyl]amino]carbon yl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-54-4 CAPLUS
CN Carbamic acid, [(1S)-2-[4-[[[2-(2-naphthalenylamino)-2-oxoethyl]amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-55-5 CAPLUS
CN Carbamic acid, [(1S)-2-oxo-2-[4-phenyl-4-[[[[3-(trifluoromethoxy)phenyl]methyl]amino]carbonyl]-1-piperidinyl]-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 256368-56-6 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[(1,3-benzodioxol-5-ylmethyl)amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-57-7 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[[(2,4-difluorophenyl)methyl]amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-58-8 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[(cyclohexylamino)carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 256368-59-9 CAPLUS
CN Carbamic acid, [(1S)-2-oxo-2-[4-phenyl-4-[[[(tetrahydro-2-furanyl)methyl]amino]carbonyl]-1-piperidinyl]-1[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-60-2 CAPLUS
CN Carbamic acid, [(1S)-2-[4-[[[(2-methoxyphenyl)methyl]amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-61-3 CAPLUS
CN Carbamic acid, [(1S)-2-oxo-2-[4-phenyl-4-[[(2-phenylcyclopropyl)amino]carbonyl]-1-piperidinyl]-1[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 256368-62-4 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[(1-naphthalenylmethyl)amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-63-5 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[[2-[[2-(2-chloro-6-fluorophenyl)ethyl]thio]ethyl]amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-64-6 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[(2,2-diphenylethyl)amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 256368-65-7 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[(9H-fluoren-9-ylamino)carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-66-8 CAPLUS

CN Carbamic acid, [(1S)-2-oxo-2-[4-phenyl-4-[[(4-phenylbutyl)amino]carbonyl]-1-piperidinyl]-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-72-6 CAPLUS

CN Carbamic acid, [(1R)-2-[[(1S)-1-[[[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-oxo-2-[4-phenyl-4-[[(4-pyridinylmethyl)amino]carbonyl]-1-piperidinyl]ethyl]amino]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-78-2 CAPLUS

CN L-Alanine, N-[(1,1-dimethylethoxy)carbonyl]-S-(triphenylmethyl)-L-cysteinyl-4-phenyl-4-piperidinecarbonyl-L-leucyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256384-55-1 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[[(4-cyanocyclohexyl)methyl]amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 443733-72-0 CAPLUS

CN L-Leucinamide, N-[(1,1-dimethylethoxy)carbonyl]-S-(triphenylmethyl)-D-cysteinyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

RN 443733-76-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2R)-2-amino-1-oxo-3-[(triphenylmethyl)thio]propyl]-4-phenyl-N-(4-pyridinylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 55 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:449648 CAPLUS  $\underline{\text{Full-text}}$ 

DOCUMENT NUMBER: 137:33220

TITLE: New 4,4-disubstituted piperidines, particularly

4-aryl-1-(arylalkyl)piperidine-4-methanols and

derivatives, and methods of use thereof as ligands of dopamine, serotonin, and norepinephrine receptors and

transporters

INVENTOR(S): Hoemann, Michael Z.

PATENT ASSIGNEE(S): Sepracor, Inc., USA

SOURCE: PCT Int. Appl., 88 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIND DATE				APPL	ICAT		DATE					
WO 2002046156				A2 20020613			WO 2001-US47036						20011204				
V	√:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,
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		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,
		UG,	UZ,	VN,	YU,	ZA,	ZM,	ZW									
F	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	CH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	TR,

BF, BJ, CF,	CG, CI	, CM, GA,	GN, GQ, GW, ML, MR, NE, SN, TD, TG
AU 2002030665	A	20020618	AU 2002-30665 20011204
US 20020177607	A1	20021128	US 2001-12182 20011204
US 6656953	В2	20031202	
US 20040142974	A1	20040722	US 2003-722114 20031125
US 7217823	B2	20070515	
US 20070225331	A1	20070927	US 2007-803670 20070514
PRIORITY APPLN. INFO.:			US 2000-251651P P 20001206
			US 2001-12182 A1 20011204
			WO 2001-US47036 W 20011204
			US 2003-722114 A1 20031125
OTHER SOURCE(S):	MARPAT	137:33220	

GΙ

$$\begin{array}{c|c} R^1 & R^2 \\ & & \\ & & \\ (c_{H_2})_n \\ R^3 - c_{-R^4} \\ & R^5 \end{array}$$

One aspect of the invention relates to the title compds. I [wherein R = H, AΒ alkyl, aralkyl, cycloalkyl, alkenyl, aryl, heteroaryl, acyl, or sulfonyl; R1 = aryl, or heteroaryl; R2 = RO-alkyl, (R)2N-alkyl, RS-alkyl, RO-cycloalkyl, (R) 2N-cycloalkyl, or RS-cycloalkyl; R3 = H, alkyl, cycloalkyl, aryl, heteroaryl, aralkyl, heteroaralkyl, OR, or F; R4 = H, alkyl, cycloalkyl, aryl, heteroaryl, aralkyl, heteroaralkyl, OR, or F; R5 = an aryl or heteroarylgroup; R3 and R4 may be connected through a covalent bond; n = 0, 1, or 2; any stereocenter can be (R), (S), or a mixture]. A second aspect of the invention relates to the use of I as ligands for various mammalian cellular receptors, including dopamine transporters. More broadly, I are (to varying degrees) ligands of dopamine, serotonin, and norepinephrine receptors and transporters. Thereby, I will find use in the treatment of, among others, addiction, anxiety, depression, sexual dysfunction, hypertension, migraine, Alzheimer's disease, obesity, emesis, psychosis, analgesia, schizophrenia, Parkinson's disease, restless leg syndrome, sleeping disorders, attention deficit hyperactivity disorder, irritable bowel syndrome, premature ejaculation, menstrual dysphoria syndrome, urinary incontinence, inflammatory pain, neuropathic pain, Lesche-Nyhane disease, Wilson's disease, and Tourette's syndrome. An addnl. aspect of the invention (no claims or data) relates to the synthesis of combinatorial libraries of I, and the screening of those libraries for biol. activity, e.g., in assays based on dopamine transporters. Examples include approx. 14 compds. I, synthetic details for most of these, some biol. activity data for all exemplified I, and syntheses of various intermediates. For instance, 4-phenylpiperidine-4-carboxylic acid (tosylate salt) underwent a sequence of: (1) N-protection with Cbz, (2) borane reduction of the acid to an alc., (3) protection of the alc. as a TBDMS ether, (4) removal of Cbz from nitrogen, (5) N-acylation with 1-(4chlorophenyl)cyclobutanecarboxylic acid using PyBOP, NMM, and DMAP, (6)

reduction of the amide to an amine using LiAlH4 in THF, and (7) desilylation, to give title compound II. The latter compound bound to norepinephrine transporter (NET) and dopamine transporter (DAT) with IC50 values of <0.1  $\mu\text{M},$  and at 5-HT transporter (5-HTT) with IC50 of <1  $\mu\text{M}.$ 

IT 167263-16-3P, 4-(Dimethylcarbamoyl)-4-phenylpiperidine-1carboxylic acid tert-butyl ester 436162-36-6P,
4-(Phenethylcarbamoyl)-4-phenylpiperidine-1-carboxylic acid benzyl ester
436162-37-7P, 4-[(Phenethylamino)methyl]-4-phenylpiperidine-1carboxylic acid benzyl ester 436162-38-8P, 4-[[(tertButoxycarbonyl)(phenethyl)amino]methyl]-4-phenylpiperidine-1-carboxylic
acid benzyl ester 436162-40-2P, [[1-[[1-(4Methoxyphenyl)cyclopropyl]carbonyl]-4-phenylpiperidin-4yl]methyl](phenethyl)carbamic acid tert-butyl ester 436162-42-4P
, 1-[[1-(4-Chlorophenyl)cyclobutyl]carbonyl]-4-phenylpiperidine-4carboxylic acid dimethylamide
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(intermediate; preparation of 4-aryl-1-(arylalkyl)piperidine-4-methanols and derivs. as ligands of dopamine, serotonin, and norepinephrine receptors and transporters)

RN 167263-16-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(dimethylamino)carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 436162-36-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[(2-phenylethyl)amino]carbonyl]-, phenylmethyl ester (CA INDEX NAME)

RN 436162-37-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[(2-phenylethyl)amino]methyl]-, phenylmethyl ester (CA INDEX NAME)

RN 436162-38-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(1,1-dimethylethoxy)carbonyl](2-phenylethyl)amino]methyl]-4-phenyl-, phenylmethyl ester (CA INDEX NAME)

RN 436162-40-2 CAPLUS

CN Carbamic acid, [[1-[[1-(4-methoxyphenyl)cyclopropyl]carbonyl]-4-phenyl-4-piperidinyl]methyl](2-phenylethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 436162-42-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-[[1-(4-chlorophenyl)cyclobutyl]carbonyl]-N,N-dimethyl-4-phenyl- (CA INDEX NAME)

L3 ANSWER 56 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2002:171864 CAPLUS Full-text

DOCUMENT NUMBER: 136:232312

TITLE: Preparation of dialkoxyaminoquinazolines as alpha-1

adrenergic antagonists

INVENTOR(S): Becker, Cyrus Kephra; Melville, Chris Richard;

Pfister, Juerg Roland; Zhang, Xiaoming

PATENT ASSIGNEE(S): F. Hoffmann-La Roche Ag, Switz.

SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

									APPLICATION NO.									
WO					A2		20020307		WO 2001-EP9749									
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BE	B, BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	, KG,	KP,	KR,	KZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN	, MW,	MX,	MZ,	NO,	NZ,	PH,	PL,	
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SI	, TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	
		UZ,	VN,	YU,	ZA,	ZW												
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ	, TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙΊ	LU,	MC,	NL,	PT,	SE,	TR,	BF,	
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW	, ML,	MR,	NE,	SN,	TD,	TG		
	2420	177			A1	2002	0307		CA 2001-2420177						20010823			
AU	2001	0937	88		Α	2002	0313	AU 2001-93788						20010823				
EP	1315	714			A2 20030604				AU 2001-93788 EP 2001-974210						20010823			
EP	1315714			B1 20051109														
	R:							•			I, IT,	LI,	LU,	NL,	SE,	MC,	PT,	
					•						, TR							
	2001								BR 2001-13585									
								JP 2002-523466						20010823				
JP	3971299				В2	2007												
CN	1545510 309240 2251512				A 2004			1110										
AT	3092	40			T 2005111				AT 2001-974210									
ES	2251			T3 2006						2001-974210								
	AU 2001293788										2001-293788							
	S 20020045614				A1					US 2001-942385			2	0010	829			
	S 6559153						20030506		== 0000 1000									
	ZA 2003001082						20040507 20030604				2003-1082 2003-PA1777							
	MX 2003PA01777						2003	0604										
PRIORIT	PRIORITY APPLN. INFO.:										2000-							
OTHER S	THER SOURCE(S):						136:	136:232312		WO	2001-	EP97	49		w 2	0010	823	
· <del>-</del>					· <del>-</del>													

Ι

$$\begin{array}{c|c}
R^{70} & & & \\
N & & & \\
R^{80} & & & \\
\end{array}$$

$$\begin{array}{c}
R^{1} & & R^{2} & (CH_{2}) m \\
N & & (CH_{2}) n
\end{array}$$

$$\begin{array}{c}
N - A \\
\end{array}$$

GI

AΒ Title compds. I [R1 = H, alkyl; R2 = alkyl, (un)substituted heterocyclyl, heteroaryl or aryl; R7 and R8 independently = alkyl; A = H, (CH2)0-1R3, COR3, SO2R3, CO2R3, CONR4R5, SO2NR4R5, C(NR6)R5 or C(NR6)NR4R5; R3 = (un) substituted alkyl, aryl, arylalkyl, heteroaryl, etc.; R4 and R5 independently = H, or R4R5 together form 5-7 membered cycloalkyl or heterocyclyl; R6 = H, alkyl, CN; n =0-2 and m = 0-3 wherein m + n  $\geq 2$ ] or prodrugs, individual isomers, racemic or non-racemic mixts. of isomers, or pharmaceutically acceptable salts or solvates thereof are prepared and disclosed as alpha-1B adrenergic receptor antagonists. Thus, II was prepared via substitution of 2-chloro-6,7-dimethylquinazolin-4- ylamine with (1-benzyl-4-phenyl-piperidin-4-ylmethyl)-methylamine, followed by N-debenzylation. II possessed a pKi of 7.99 toward alpha-1B, pKi of 6.52 toward alpha-1A, and pKi of 6.60 toward alpha-1D. The invention further relates to pharmaceutical compns. containing I and the use of such compds. in the control and prevention of diseases, such as disorders of the urinary tract, sexual dysfunction, pain, or disorders of the central nervous system.

IT 403512-86-7P 403513-21-3P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(target compound; preparation of alpha-1 adrenergic antagonists N-piperidinylmethylaminodialkoxyquinazolines and subsequent N-derivatization of piperidine moiety)

RN 403512-86-7 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl](tetrahydro-2-furanyl)- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{MeO} \\ \end{array}$$

RN 403513-21-3 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-N-3-pyridinyl- (CA INDEX NAME)

IT 403512-42-5P 403512-43-6P 403512-44-7P 403512-47-0P 403512-48-1P 403512-49-2P 403512-50-5P 403512-52-7P 403512-53-8P

403512-54-9P 403512-55-0P 403512-56-1P 403512-57-2P 403512-58-3P 403512-59-4P 403512-60-7P 403512-69-6P 403512-70-9P 403512-71-0P 403512-72-1P 403512-73-2P 403512-74-3P 403512-87-8P 403512-88-9P 403512-89-0P 403512-90-3P 403512-91-4P 403512-93-6P 403512-94-7P 403512-95-8P 403512-96-9P 403512-97-0P 403512-98-1P 403512-99-2P 403513-00-8P 403513-01-9P 403513-02-0P 403513-03-1P 403513-04-2P 403513-05-3P 403513-06-4P 403513-07-5P 403513-08-6P 403513-09-7P 403513-10-0P 403513-11-1P 403513-12-2P 403513-13-3P 403513-14-4P 403513-15-5P 403513-16-6P 403513-18-8P 403513-20-2P 403513-22-4P 403513-23-5P 403513-24-6P 403513-25-7P 403513-26-8P 403513-27-9P 403513-37-1P 403513-38-2P 403513-39-3P 403513-55-3P 403513-64-4P 403513-80-4P 403516-44-9P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (target compound; preparation of alpha-1 adrenergic antagonists N-piperidinylmethylaminodialkoxyquinazolines and subsequent N-derivatization of piperidine moiety)

RN 403512-42-5 CAPLUS CN Methanone, [4-[[(4-

Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]cyclopropyl- (CA INDEX NAME)

RN 403512-43-6 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-2-furanyl- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array}$$

RN 403512-44-7 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)amino]methyl]-4-phenyl-1-piperidinyl]-2-furanyl- (CA INDEX NAME)

RN 403512-47-0 CAPLUS

CN Ethanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-2-phenyl- (CA INDEX NAME)

RN 403512-48-1 CAPLUS

CN 1-Butanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyll-4-phenyl-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c}
\text{MeO} \\
\text{MeO}
\end{array}$$

$$\begin{array}{c}
\text{Me} \\
\text{N}
\end{array}$$

$$\begin{array}{c}
\text{N} \\
\text{N}
\end{array}$$

$$\begin{array}{c}
\text{CPr-r} \\
\text{Ph}
\end{array}$$

RN 403512-49-2 CAPLUS

CN Ethanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]- (CA INDEX NAME)

RN 403512-50-5 CAPLUS

CN 1-Propanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]- (CA INDEX NAME)

RN 403512-52-7 CAPLUS

CN 1-Propanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-2-methyl- (CA INDEX NAME)

RN 403512-53-8 CAPLUS

CN 1-Propanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]meth yl]-4-phenyl-1-piperidinyl]-2,2-dimethyl- (CA INDEX NAME)

$$\begin{array}{c}
MeO \\
MeO
\end{array}$$

$$\begin{array}{c}
Me \\
N
\end{array}$$

$$\begin{array}{c}
Me \\
N
\end{array}$$

$$\begin{array}{c}
C \\
Ph
\end{array}$$

$$\begin{array}{c}
C \\
D
\end{array}$$

$$\begin{array}{c}
Bu-t \\
D
\end{array}$$

RN 403512-54-9 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-3-pyridinyl- (CA INDEX NAME)

RN 403512-55-0 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl](4-methoxyphenyl)- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array} \qquad \begin{array}{c} \text{Me} \\ \text{N} \\ \text{NH}_2 \end{array} \qquad \begin{array}{c} \text{OMeO} \\ \text{N} \\ \text{N} \\ \text{N} \end{array}$$

RN 403512-56-1 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-N,N-diethyl-4-phenyl- (CA INDEX NAME)

RN 403512-57-2 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]phenyl- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array} \\ \text{NH}_2 \\ \text{Ph} \\ \text{NH}_2 \\ \text{Ph} \\ \text{NH}_2 \\ \text{NH}_2 \\ \text{NH}_3 \\ \text{NH}_4 \\ \text{NH}_4 \\ \text{NH}_5 \\ \text{NH}_5 \\ \text{NH}_5 \\ \text{NH}_6 \\ \text{N$$

RN 403512-58-3 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl](4-chlorophenyl)- (CA INDEX NAME)

RN 403512-59-4 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-2-thienyl- (CA INDEX NAME)

$$\begin{array}{c}
MeO \\
MeO
\end{array}$$

$$\begin{array}{c}
Me \\
N
\end{array}$$

$$\begin{array}{c}
N \\
N
\end{array}$$

$$\begin{array}{c}
CH2 \\
Ph
\end{array}$$

$$\begin{array}{c}
N \\
CH2
\end{array}$$

RN 403512-60-7 CAPLUS

CN 1-Butanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyllourophenyl)-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array} \qquad \begin{array}{c} \text{Me} \\ \text{NH}_2 \end{array} \qquad \begin{array}{c} \text{N} \\ \text{C-Pr-n} \\ \text{NH}_2 \end{array}$$

RN 403512-69-6 CAPLUS

CN Ethanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-2-cyclopropyl- (CA INDEX NAME)

$$\begin{array}{c}
\text{MeO} \\
\text{MeO}
\end{array}$$

$$\begin{array}{c}
\text{Me} \\
\text{N}
\end{array}$$

$$\begin{array}{c}
\text{CH2} \\
\text{Ph}
\end{array}$$

RN 403512-70-9 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]cyclopentyl- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array} \qquad \begin{array}{c} \text{Me} \\ \text{N} \\ \text{CH}_2 \\ \text{Ph} \\ \end{array}$$

RN 403512-71-0 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]cyclobutyl- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array} \\ \begin{array}{c} \text{N} \\ \text{Ph} \\ \end{array} \\ \begin{array}{c} \text{N} \\ \text{C} \\ \text{C} \\ \end{array}$$

RN 403512-72-1 CAPLUS

CN 1-Butanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-(2-methoxyphenyl)-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array}$$

RN 403512-73-2 CAPLUS

CN 1-Butanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-(4-methoxyphenyl)-1-piperidinyl]- (CA INDEX NAME)

RN 403512-74-3 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-(4-methoxyphenyl)-1-piperidinyl]cyclopropyl- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array} \begin{array}{c} \text{Me} \\ \text{NH}_2 \end{array} \begin{array}{c} \text{N} \\ \text{OMe} \end{array}$$

RN 403512-87-8 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl](tetrahydro-2-furanyl)-, hydrochloride (1:?) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array} \qquad \begin{array}{c} \text{Me} \\ \text{N} \\ \text{Ph} \end{array}$$

●x HCl

RN 403512-88-9 CAPLUS

CN 1-Propanone, 2-(acetyloxy)-1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-2-methyl- (CA INDEX NAME)

RN 403512-89-0 CAPLUS

CN Ethanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-2-methoxy- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array} \qquad \begin{array}{c} \text{Ne} \\ \text{NH}_2 \end{array} \qquad \begin{array}{c} \text{O} \\ \text{C-CH}_2 \text{-OMe} \\ \text{O} \\ \text{C-CH}_2 \text{-OMe} \\ \text{NH}_2 \end{array}$$

RN 403512-90-3 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-4-morpholinyl- (CA INDEX NAME)

$$\begin{array}{c}
MeO\\
MeO\\
NH2
\end{array}$$

$$\begin{array}{c}
Me\\
N\\
NH2
\end{array}$$

$$\begin{array}{c}
N\\
N\\
N\\
N\\
N
\end{array}$$

RN 403512-91-4 CAPLUS

CN 1-Propanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]meth yl]-4-phenyl-1-piperidinyl]-2-hydroxy-2-methyl- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array} \qquad \begin{array}{c} \text{N} \\ \text{N} \\ \text{Ph} \end{array} \qquad \begin{array}{c} \text{OOH} \\ \text{Me} \\ \text{MeO} \\ \text{N} \\ \text{N} \end{array}$$

RN 403512-93-6 CAPLUS

CN 1-Propanone, 3-amino-1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]- (CA INDEX NAME)

RN 403512-94-7 CAPLUS

CN Ethanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-2-(methylamino)- (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \text{Me} \\ \text{N} \\ \text{H}_2 \end{array}$$

RN 403512-95-8 CAPLUS

CN 1-Butanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyll-4-phenyl-1-piperidinyl]-3-hydroxy- (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{MeO} \\ \text{NH}_2 \end{array}$$

RN 403512-96-9 CAPLUS

CN Ethanone, 2-amino-1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array}$$

RN 403512-97-0 CAPLUS

CN 1-Butanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methy 1]-4-phenyl-1-piperidinyl]-4,4,4-trifluoro- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array}$$

RN 403512-98-1 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl](tetrahydro-2H-pyran-4-yl)- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array}$$

RN 403512-99-2 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-2-pyridinyl- (CA INDEX NAME)

$$\begin{array}{c}
MeO \\
MeO
\end{array}$$

$$\begin{array}{c}
Me \\
N \\
NH2
\end{array}$$

$$\begin{array}{c}
N \\
Ph
\end{array}$$

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-2-pyrrolidinyl- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array}$$

RN 403513-01-9 CAPLUS

CN 1-Propanone, 2-amino-1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-3-phenyl- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array}$$

RN 403513-02-0 CAPLUS

CN 1-Butanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-4-hydroxy- (CA INDEX NAME)

RN 403513-03-1 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl](tetrahydro-3-furanyl)- (CA INDEX NAME)

RN 403513-04-2 CAPLUS

CN 1,3-Butanedione, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array} \qquad \begin{array}{c} \text{Me} \\ \text{N} \\ \text{Ph} \\ \text{N} \end{array} \qquad \begin{array}{c} \text{C} \\ \text{C} \\ \text{C} \\ \text{C} \\ \text{MeO} \\ \text{N} \end{array}$$

RN 403513-05-3 CAPLUS

CN 1-Butanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-3-methyl- (CA INDEX NAME)

$$\begin{array}{c}
MeO \\
MeO
\end{array}$$

$$\begin{array}{c}
Me \\
N
\end{array}$$

$$\begin{array}{c}
Me \\
N
\end{array}$$

$$\begin{array}{c}
C \\
Ph
\end{array}$$

$$\begin{array}{c}
C \\
D
\end{array}$$

$$\begin{array}{c}
Bu-i \\
D
\end{array}$$

RN 403513-06-4 CAPLUS

CN Ethanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-2-hydroxy- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array} \qquad \begin{array}{c} \text{N} \\ \text{Ph} \\ \text{NH}_2 \end{array} \qquad \begin{array}{c} \text{C} \\ \text{CH}_2 - \text{OB} \\ \text{C} \\$$

RN 403513-07-5 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl][(2S)-tetrahydro-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 403513-08-6 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl][(2R)-tetrahydro-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 403513-09-7 CAPLUS

CN 4-Piperidinemethanamine, N-(4-amino-6,7-dimethoxy-2-quinazolinyl)-N-methyl-4-phenyl-1-[(2R)-2-pyrrolidinylcarbonyl]- (9CI) (CA INDEX NAME)

RN 403513-10-0 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-(2S)-2-pyrrolidinyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 403513-11-1 CAPLUS

CN 1-Propanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]meth yl]-4-phenyl-1-piperidinyl]-3-hydroxy- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array}$$

RN 403513-12-2 CAPLUS

CN 1-Butanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-3-hydroxy-3-methyl- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array}$$

RN 403513-13-3 CAPLUS

CN 1-Propanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]meth yl]-4-phenyl-1-piperidinyl]-3-hydroxy-2,2-dimethyl- (CA INDEX NAME)

RN 403513-14-4 CAPLUS

CN 1-Butanone, 3-amino-1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-3-methyl- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array}$$

RN 403513-15-5 CAPLUS

CN Carbamic acid, [3-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-1,1-dimethyl-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 403513-16-6 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl](4,5-dihydro-1H-imidazol-2-yl)- (CA INDEX NAME)

RN 403513-18-8 CAPLUS

CN 1-Butanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methy 1]-4-phenyl-1-piperidinyl]-3-hydroxy-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 403513-20-2 CAPLUS

CN 1-Butanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyll-4-phenyl-1-piperidinyl]-3-hydroxy-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 403513-22-4 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-N-3-pyridinyl-, hydrochloride (1:?) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array} \qquad \begin{array}{c} \text{N} \\ \text{N} \\ \text{Ph} \end{array} \qquad \begin{array}{c} \text{O} \\ \text{NH} \\ \text{N} \\ \text{NH}_2 \end{array}$$

●x HCl

RN 403513-23-5 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-N,N-dimethyl-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array}$$

RN 403513-24-6 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-N-methyl-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array} \qquad \begin{array}{c} \text{N} \\ \text{Ph} \\ \text{NH}_2 \end{array}$$

RN 403513-25-7 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-N-(1,1-dimethylethyl)-4-phenyl- (CA INDEX NAME)

RN 403513-26-8 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-N,4-diphenyl- (CA INDEX NAME)

RN 403513-27-9 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-N-butyl-4-phenyl- (CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array} \qquad \begin{array}{c} \text{Me} \\ \text{NH}_2 \\ \text{Ph} \end{array}$$

RN 403513-37-1 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-(4-fluorophenyl)-N-3-pyridinyl-(CA INDEX NAME)

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{NH}_2 \end{array} \\ \begin{array}{c} \text{N} \\ \text{CH}_2 \\ \text{F} \end{array} \\ \begin{array}{c} \text{O} \\ \text{NH} \\ \text{C} \\ \text{NH} \\ \text{O} \end{array}$$

RN 403513-38-2 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-N-2-pyridinyl- (CA INDEX NAME)

RN 403513-39-3 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl](4-methyl-1-piperazinyl)- (CA INDEX NAME)

$$\underset{\mathsf{MeO}}{\mathsf{MeO}} \overset{\mathsf{Me}}{\underset{\mathsf{NH2}}{\mathsf{NH2}}} \overset{\mathsf{Me}}{\underset{\mathsf{Ph}}{\mathsf{N}}} \overset{\mathsf{N}}{\underset{\mathsf{Ph}}{\mathsf{CH2}}} \overset{\mathsf{O}}{\underset{\mathsf{Ph}}{\mathsf{N}}} \overset{\mathsf{N}}{\underset{\mathsf{NH2}}{\mathsf{N}}} \overset{\mathsf{Me}}{\underset{\mathsf{NH2}}{\mathsf{N}}}$$

RN 403513-55-3 CAPLUS

CN Ethanone, 1-[4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl]-2-(2-pyridinyl)- (CA INDEX NAME)

$$\begin{array}{c}
MeO \\
MeO
\end{array}$$

$$\begin{array}{c}
Me \\
N
\end{array}$$

$$\begin{array}{c}
C \\
CH2
\end{array}$$

$$\begin{array}{c}
N \\
N
\end{array}$$

$$\begin{array}{c}
C \\
CH2
\end{array}$$

$$\begin{array}{c}
N \\
N \\
N
\end{array}$$

RN 403513-64-4 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-N-ethyl-4-phenyl- (CA INDEX NAME)

RN 403513-80-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-, ethyl ester (CA INDEX NAME)

RN 403516-44-9 CAPLUS

CN Methanone, [4-[[(4-amino-6,7-dimethoxy-2-quinazolinyl)methylamino]methyl]-4-phenyl-1-piperidinyl](2,3-dihydro-1,4-benzodioxin-2-yl)- (CA INDEX NAME)

L3 ANSWER 57 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:817246 CAPLUS Full-text

DOCUMENT NUMBER: 135:357843

TITLE: Preparation of 2-Aryl indole derivatives for use as

tachykinin receptor antagonists

INVENTOR(S): Dinnell, Kevin; Elliott, Jason Matthew; Hollingworth,

Gregory John; Ridgill, Mark Peter; Shaw, Duncan Edward

PATENT ASSIGNEE(S): UK

SOURCE: U.S. Pat. Appl. Publ., 37 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 20010039286
PRIORITY APPLN. INFO.:
OTHER SOURCE(S):

GB 2000-3397

2001-782422 20010213 2000-3397 A 20000214

MARPAT 135:357843

GI

$$\mathbb{R}^{1}$$

$$\mathbb{R}^{2}$$

$$\mathbb{R}^{3}$$

$$\mathbb{R}^{6}$$

$$\mathbb{R}^{5}$$

$$\mathbb{R}^{2}$$

AΒ 2-Aryl indole derivs. I (wherein R1a, R1b, and R2 = a variety of substituents; R3 = optionally substituted Ph, biphenyl or naphthyl or heteroaryl group; R4 = H, (C1-6)alkyl, carbonyl (=0), (CH2)pphenyl or a (C1-2)alkylene bridge across the piperidine ring; R5 and R6 = variety of substituents; or R5 and R6 together are linked so as to form an optionally substituted 5-or 6-membered ring; X = O or S, two H atoms, boxHNH or boxHN(C1-6 alkyl); Y = straight or branched (C1-4)alkylene, (C2-4)alkenylene or (C2-4)alkynylene chain; the dotted line represents an optional double bond; m = 0,1,2,3,4; n = 1,2,3,4; and p = 1, 2, 3, 4), or a pharmaceutically acceptable salt thereof, were prepared, and their use as tachykinin receptor antagonists evaluated. diisopropylethylamine and bromoacetonitrile were added to a loaded resin (synthetic preparation given) in N-methylpyrrolidinone, to which was added a solution of 6-(methylsulfonyl)spiro-[2H-1-benzopyran-2,4'-piperidin]-4(3H)-one in THF to give 1'-{3-[5-chloro-2-(4-chlorophenyl)-1H-indol-3-yl]-1-oxopropyl}-6- (methylsulfonyl)spiro(2H-1-benzopyran-2,4'-piperidin)-4(3H)-one. The compds. are of particular use in the treatment or prevention of depression, anxiety, pain, inflammation, migraine, emesis or postherpetic neuralgia. Biol. data are given.

IT 371969-60-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aryl indole derivs. as tachykinin receptor antagonists for treatment for)

RN 371969-60-7 CAPLUS

CN Acetamide, N-[[1-[3-[5-chloro-2-(4-chlorophenyl)-1H-indol-3-yl]-1-oxopropyl]-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME)

IT 158144-82-2P 199104-98-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of aryl indole derivs. as tachykinin receptor antagonists for treatment for)

RN 158144-82-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 199104-98-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(acetylamino)methyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

L3 ANSWER 58 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:713309 CAPLUS Full-text

DOCUMENT NUMBER: 135:272955

TITLE: Preparation of diphenylalkylpiperidine derivatives

useful as opioid  $\delta$  receptor agonists

INVENTOR(S): Tsushima, Masaki; Tadauchi, Kaori; Asai, Kenji; Miike,

Naoko; Kudo, Toshiaki

PATENT ASSIGNEE(S): Meiji Seika Kaisha, Ltd., Japan

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	NO.			KIN	D i	DATE			APPL	ICAT	ION :	NO.		D	ATE	
					_									_		
WO 2001	0706	89		A1		2001	0927	;	WO 2	001-	JP22	65		2	0010	322
W:	ΑE,	AG, AL, AM, AT, AU, A					AZ,	BA,	BB,	ВG,	BR,	BY,	BZ,	CA,	CH,	CN,
	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,
	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,
	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,
	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,

YU, ZA, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG AU 2001042744 20011003 AU 2001-42744 Α 20010322 CA 2404280 Α1 20020923 CA 2001-2404280 20010322 EP 1277737 Α1 20030122 EP 2001-915686 20010322 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR AU 2001242744 В2 20050721 AU 2001-242744 20010322 US 20030176693 Α1 20030918 US 2003-221172 20030313 US 6790854 В2 20040914 PRIORITY APPLN. INFO.: JP 2000-85202 A 20000324 WO 2001-JP2265 W 20010322 MARPAT 135:272955 OTHER SOURCE(S):

Ι

$$R^{2}$$
 $(CH_{2})$ 
 $nN$ 
 $R^{3}$ 
 $R^{4}$ 

Substances of the general formula [I; X = R5R6NCO, R7R8NSO2, R9R10NCH2, R11CO, AΒ R1202C; n = 1,2; R1, R2 = H, halo, (un) substituted lower alkyl, alkenyl, or alkoxy, HO; or R1-R2 represent OCH2O; R3 = H, halo, (un)substituted lower alkyl, alkenyl, alkoxy, NH2, or CONH2, HO, cyano, (un)substituted lower alkoxycarbonyl, (un)substituted lower alkylcarbonyl; R4 = (un)saturated monoor bicyclic carbocyclyl, mono- or bicyclic heterocyclyl containing ≥1 heteroatom(s) selected from O, N, and S; wherein R5 - R12 = H, (un)substituted lower alkyl or alkenyl; or R3 and R4 , R5 and R6, R7 and R8, or R9 and R10 are linked to each other to form a ring structure], which exhibit affinity for opioid  $\delta$  receptor, are prepared Also claimed are drugs which contain the substances I as the active ingredient and are useful in the prevention and/or treatment of central nervous system diseases such as schizophrenia, depression, epilepsy, Alzheimer's disease, and Parkinson's disease and peripheral nerve diseases such as pains. Thus, 1-bromo-3-(4diethylcarbamoylphenyl) - 3-(3-methoxyphenyl)propane and K2CO3 were added to a solution of 1-phenyl-1,3,8-triazabicyclo[4.5]decan-4-one in DMF and stirred at room temperature for 17 h to give 61% 8-[3-(4-diethylcarbamoylphenyl)-3-(3methoxyphenyl)propyl]-1-phenyl-1,3,8-triazaspiro[4.5]decan-4-one which was dissolved in CH2Cl2, treated with a 1.0 M solution of BBr3 in CH2Cl2, and stirred at room temperature for 2 h to give, after workup and salt formation with HCl, 92% 8-[3-(4-diethylcarbamoylphenyl)-3-(3-hydroxyphenyl)propyl]-1phenyl-1,3,8-triazaspiro[4.5]decan-4-one (II). II in vitro exhibited the binding affinity to opioid  $\sigma$  receptor preparation from rat fore-brain with Ki of 171 nM.

IT 356072-57-6P 363172-75-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation of diphenylalkylpiperidine derivs. as opioid  $\delta$  receptor agonists for treatment and/or prevention of central nervous system diseases and peripheral nerve diseases)

RN 356072-57-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(ethoxycarbonyl)amino]methyl]-4-(2-methylphenyl)-, ethyl ester (CA INDEX NAME)

RN 363172-75-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-(2-methylphenyl)-, ethyl ester (CA INDEX NAME)

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 59 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:690103 CAPLUS Full-text

DOCUMENT NUMBER: 135:227251

TITLE: Preparation of N-sulfonylated 4-aminophenylalanine

dipeptide derivatives as inhibitors of leukocyte

adhesion mediated by VLA-4

INVENTOR(S): Ashwell, Susan; Grant, Francine S.; Konradi, Andrei

W.; Kreft, Anthony; Lombardo, Louis John; Pleiss, Michael A.; Sarantakis, Dimitrios; Semko, Christopher

M.; Thorsett, Eugene D.

PATENT ASSIGNEE(S): Athena Neurosciences, Inc., USA; American Home

Products Corp.

SOURCE: U.S., 45 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6291453	В1	20010918	US 1998-126091	19980730

OTHER SOURCE(S):

MARPAT 135:227251

Disclosed are title dipeptides R1SO2NR2CHR3-Q-CHR5CO2H [R1 = (un)substituted alkyl, aryl, cycloalkyl, heterocyclyl or heteroaryl; R2 = H, (un)substituted alkyl, cycloalkyl, cycloalkenyl, heterocyclyl, aryl or heteroaryl; R3 = H, any group R1; R1R2N or R2R3N may be (un)substituted heterocyclyl; R5 = (CH2)x-Ar-R5'; R5' = NR12C( $\mathbb{Z}$ )NR8R8', NR12C( $\mathbb{Z}$ )R13; R12 = H, alkyl, aryl; R8, R8' = H, any group R1; R8 and R8' may join together to form a heterocyclic ring; R13 = saturated heterocyclyl; Z = 0, S, NR13; x = 1-4; Ar = (un)substituted (hetero)aryl; Q = C(X)NR7; R7 = H, alkyl; X = O, S (with provisos)] which bind VLA-4 (also referred to as  $\alpha 4\beta 1$  integrin and CD49d/CD29). Certain of these compds. also inhibit leukocyte adhesion and, in particular, leukocyte adhesion mediated by VLA-4. Such compds. are useful in the treatment of inflammatory diseases in a mammalian patient, e.g., human, such as asthma, Alzheimer's disease, atherosclerosis, AIDS dementia, diabetes, inflammatory bowel disease, rheumatoid arthritis, tissue transplantation, tumor metastasis and myocardial ischemia. The compds. can also be administered for the treatment of inflammatory brain diseases such as multiple sclerosis. Thus, condensation of N-tosyl-L-prolyl-4-amino-L-phenylalanine Me ester with 3-phenylpropyl isothiocyanate afforded N-tosyl-L-prolyl-4-[3-(3- phenylpropyl)thioureido]-Lphenylalanine Me ester.

IT 220149-67-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-sulfonylated aminophenylalanine dipeptide derivs. as inhibitors of leukocyte adhesion mediated by VLA-4)

RN 220149-67-7 CAPLUS

CN L-Phenylalanine, 1-[(4-methylphenyl)sulfonyl]-L-prolyl-4-[[[1-[(1,1-dimethylethoxy)carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 60 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:617978 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 135:195564

TITLE: Preparation of phenoxyalkylamine derivatives useful as

opioid  $\delta$  receptor agonists

INVENTOR(S): Tsushima, Masaki; Tadauchi, Kaori; Asai, Kenji; Miike,

Naoko; Imai, Masako; Kudo, Toshiaki

PATENT ASSIGNEE(S): Meiji Seika Kaisha, Ltd., Japan

SOURCE: PCT Int. Appl., 152 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.						DATE										DATE	
	2001																 20010	216
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BI	3,	BG,	BR,	BY,	BZ,	CA	, СН,	CN,
		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES	S,	FI,	GB,	GD,	GE,	GH	, GM,	HR,
		HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KI	₹,	KΖ,	LC,	LK,	LR,	LS	, LT,	LU,
		LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	M	Ζ,	NO,	NZ,	PL,	PT,	RO	, RU,	SD,
		SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	T	Γ,	TZ,	UA,	UG,	US,	UZ	, VN,	YU,
		ZA,	ZW															
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ	Ζ,	TZ,	UG,	ZW,	ΑT,	ΒE	, СН,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	I	Γ,	LU,	MC,	NL,	PT,	SE	, TR,	BF,
							GΑ,											
CA	2400	640			A1		2001	0823		CA	20	01-	2400	640			20010	216
	AU 2001032319				Α		2001	0827		ΑU	20	01-	3231	9			20010	216
AU	2001	2323	19		A2		2001	0827		ΑU	20	01-	2323	19			20010	216
	2001																	
	1256									EΡ	20	01-	9045	01			20010	216
EP	1256	575			В1		2005	0817										
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GI	₹,	ΙΤ,	LI,	LU,	NL,	SE	, MC,	PT,
							RO,											
AT	3021	84			Τ		2005	0915		ΑT	20	01-	9045	01				
ES	2248	281			Т3		2006	0316		ES	20	01-	9045	01			20010	
US	2003	0171	370		A1		2003	0911		US	20	02-	2036	17			20021	203
US	6916	822			В2		2005	0712										
	2005				A1		2005	0707									20050	
PRIORIT	Y APP	LN.	INFO	.:										_			20000	
																	20010	
										US	20	002-	2036	17		А3	20021	203
OTHER S	SOURCE(S):				MAR1	PAT	135:	1955	64									

OTHER SOURCE(S): MARPAT 135:195564

$$X = A = B$$
 $R^{1}$ 
 $O = \frac{R^{2}}{L} (CH_{2}) n = \frac{R^{3}}{L} N$ 
 $R^{4}$ 
 $R^{5}$ 
 $R^{5}$ 

The title compds. I [X is a group represented by the general formula R7R8NCO, etc.; A is a saturated or unsatd. 3- to 6-membered carbocyclic group or the like; B is CH2 or the like; n is 0 to 2; R1 is hydrogen, halogeno, or the like; R2, R3, and R7, R8 are each hydrogen, optionally substituted lower alkyl, or the like; R4 is hydrogen, optionally substituted lower alkyl, or the like; R5 is hydrogen, halogeno, or the like; and R6 is a saturated or unsatd. mono- or bicyclic carbocyclic group or the like, or alternatively, R5 and R6, R7 and R8 may be united to form a cyclic structure] are prepared In an in vitro test for affinity for the  $\delta$  opioid receptors, 1-[2-[2-(4-isobutyloxycarbonylbenzyl)phenoxy]ethyl]-4-(2-hydroxymethyl-1H-benzimidazol-1-yl)piperidine showed the Ki value of 73 nM.

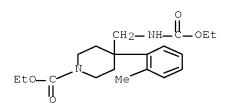
IT 356072-57-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of phenoxyalkylamine derivs. useful as opioid  $\delta$  receptor agonists)

RN 356072-57-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(ethoxycarbonyl)amino]methyl]-4-(2-methylphenyl)-, ethyl ester (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 61 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:564836 CAPLUS  $\underline{\text{Full-text}}$ 

DOCUMENT NUMBER: 135:152815

TITLE: Preparation of tetrahydropyrimidone inhibitors of

fatty acid binding protein

INVENTOR(S): Sulsky, Richard; Robl, Jeffrey A. PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 158 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.					D	DATE			APPI	ICAT	ION 1	NO.		D	ATE	
WC	2001	0546	94		A1	_	2001	0802		 WO 2	2001-	US23	50		2	0010	 125
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,
		HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,
		SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,
		YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM				
	YU, ZA, ZV RW: GH, GM, KI				LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
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		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG		
CZ	2396	596			A1		2001	0802		CA 2	2001-	2396	596		2	0010	125
EF	2 1253	925			A1		2002	1106		EP 2	2001-	9050.	26		2	0010	125
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑL,	TR						
JI	2004	5010	66		Τ		2004	0115		JP 2	2001-	5546	78		2	0010	125
US					A1		2002	0711		US 2	2001-	7713	10		2	0010	126
US	6649	622			В2		2003	1118									
PRIORI	TY APP	LN.	INFO	.:						US 2	-0009	1785	98P	]	P 2	0000	128
										WO 2	2001-	US23.	50	Ţ	w 2	0010	125

OTHER SOURCE(S):
GI

The title compds. [I; A, B = (un)substituted Ph, alkyl, heteroalkyl, etc.; X = CO2H, CO2(alkyl), SO3H, etc.; Y = H, alkyl, aryl, etc.; X and Y, taken together with the atom to which they are joined, provide a group C:CZR11 (Z = CO2H, CO2(alkyl), SO3H, etc.; R11 = H, alkyl, cycloalkyl, etc.)] which are aP2 inhibitors useful for treating diabetes and related diseases, especially Type II diabetes, were prepared E.g., a multi-step synthesis of II was given. A method is also provided for treating diabetes and related diseases, especially Type II diabetes, employing aP2 inhibitor I or a combination of such aP2 inhibitor and another antidiabetic agent such as metformin, glyburide troglitazone and/or insulin.

IT 352324-72-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tetrahydropyrimidone inhibitors of fatty acid binding protein)

RN 352324-72-2 CAPLUS

CN 5-Pyrimidineacetic acid, 5-[2-[4-[(acetylamino)methyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]-1-[(2,4-dichlorophenyl)methyl]hexahydro-3-(4-methylphenyl)-2-oxo- (CA INDEX NAME)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 62 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:152640 CAPLUS Full-text DOCUMENT NUMBER: 134:208130

TITLE: Preparation of substituted ureas as cell adhesion

inhibitors

INVENTOR(S): Delaszlo, Stephen E.; Hagmann, William K.; Kamenecka,

Theodore M.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA.	PATENT NO.				KIN	D	DATE		-	APPL	ICAT	ION I	NO.		D	ATE	
	2001 2001				A2 A3		2001 2002		,	WO 2	000-	US22	437		2	0000	816
,,,	W: AE, AG, AI CR, CU, CZ HU, ID, II LV, MA, MI SE, SG, SI ZA, ZW RW: GH, GM, KE				AM, DE, IN, MG,	AT, DK, IS, MK,	AU, DM, JP, MN,	AZ, DZ, KE, MW,	EE, KG, MX,	ES, KR, MZ,	FI, KZ, NO,	GB, LC, NZ,	GD, LK, PL,	GE, LR, PT,	GH, LS, RO,	GM, LT, RU,	HR, LU, SD,
	2000 6353	GH, DE, CF, 0690	GM, DK, CG,	ES, CI,	FI, CM, A	FR, GA,	MZ, GB, GN, 2001 2002	GR, GW, 0319	IE, ML,	IT, MR, AU 2 US 2 US 1	LU, NE,	MC, SN, 6909 6414 1500	NL, TD, 3 08 55P	PT, TG	SE, 2 2 2		BJ, 816 817 820

OTHER SOURCE(S): MARPAT 134:208130

Compds. R1R2NCONR3CR4R5-Y-COR6 [R1, R2 = H, (un)substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, or heteroaryl or R1R2N form a monoor bicyclic ring; R3 is any group given for R1/R2 or R2 and R3 together with the atoms to which they are attached form a heterocyclic ring with the proviso that R1 and R2 do not form a ring; R4 = (un) substituted alkyl, aryl, arylalkyl, biaryl, biarylalkyl, heteroaryl, heteroarylalkyl, heteroarylaryl, heteroarylarylalkyl, arylheteroaryl, or arylheteroarylalkyl; R5 = H, (un) substituted alkyl, alkenyl, or alkynyl; R6 = OH, alkoxy, alkenoxy, alkynoxy, aryloxy, arylalkoxy, or an amino group; Y is a bond or CR7R8, where R7 = H, alkyl, alkenyl, alkynyl, aryl, or arylalkyl; R8 is any group given for R7 plus OH, alkoxy, halo, NO2, amino, etc.] were prepared as antagonists of VLA-4 and/or  $\alpha 4\beta 7$  and are useful in the inhibition or prevention of cell adhesion and cell-adhesion mediated pathologies. Thus, treating 4-(2methoxyphenyl)-L- phenylalanine tert-Bu ester (obtained from 4-iodo-Lphenylalanine and 2-methoxyphenylboronic acid) with pyrrolidine and pnitrophenyl chloroformate in CH2Cl2 containing diisopropylethylamine and ester cleavage with 50% TFA/CH2C12 afforded N-(1-pyrrolidinylcarbonyl)-4-(2methoxyphenyl)-L-phenylalanine.

IT 328257-59-6P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted ureas as cell adhesion inhibitors)

RN 328257-59-6 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid,  $\alpha$ -[[[4-(aminocarbonyl)-4-phenyl-1-piperidinyl]carbonyl]amino]-2'-cyano-, ( $\alpha$ S)- (CA INDEX NAME)

Absolute stereochemistry.

L3 ANSWER 63 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:137020 CAPLUS Full-text

DOCUMENT NUMBER: 134:193741

TITLE: Preparation of peptide derivatives as cell adhesion

inhibitors

INVENTOR(S):
Lee, Wen-Cherng; Scott, Daniel; Cornebise, Mark;

Petter, Russell

PATENT ASSIGNEE(S): Biogen, Inc., USA

SOURCE: PCT Int. Appl., 144 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D.	ATE	
WO	2001	0121	 86		A1	_	2001	0222		——— WO 2	000-	 US22	285		2	0000	814
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		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	GM,	HR,
		HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NΖ,	PL,	PT,	RO,	RU,
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		•	ZA,														
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		DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,
							GN,			•		•					
	2380				A1		2001									0000	
	2000															0000	
	2002						2002			HU 2	002-	2469			2	0000	814
HU	2002						2004										
	1265						2002			EP 2	000-	9592	32		2	0000	814
EP	1265				B1		2006										
	R:	ΑT,	,		•	,	•	•	•	•	IT,	LI,	LU,	NL,	SE,	MC,	PT,
	0000	,	,	,	,	,	RO,	,	,		0.01	<b>-16</b>	2.0		0	0000	011
	2003						2003						32			0000	
EE	2002						2003						F 0			0000	
	6630				B1		2003									0000	
NZ	5170				A		2004					5170				0000	
AU	7806						2005									0000	
	3433						2006									0000	
	1741						2007			EP Z	006-	2133	3		2	0000	814
ĽР	1741		שת	CII	A3		2007		TO T	מש	CD	CD	TE	TT	тт	т тт	МС
	K:	AT,			CI,	DE,	DK,	ES,	гт,	rK,	GB,	GK,	ть,	ΤΙ,	⊥⊥,	LU,	MC,
		мь,	PT,	SE													

ES	2270868	Т3	20070416	ES	2000-959232		20000814
IN	2002DN00160	A	20061229	IN	2002-DN160		20020207
MX	2002PA01449	A	20020702	MX	2002-PA1449		20020211
ZA	2002001158	A	20030512	ZA	2002-1158		20020211
NO	2002000725	A	20020408	ИО	2002-725		20020213
NO	324044	B1	20070730				
BG	106510	A	20021031	ВG	2002-106510		20020311
HK	1051500	A1	20070202	HK	2003-103786		20030527
US	20040132809	A1	20040708	US	2003-677756		20031003
US	7034043	B2	20060425				
US	20060166961	A1	20060727	US	2006-362043		20060227
PRIORITY	APPLN. INFO.:			US	1999-148845P	Р	19990813
				ΕP	2000-959232	АЗ	20000814
				US	2000-638652	Α1	20000814
				WO	2000-US22285	W	20000814
				US	2003-677756	A1	20031003

OTHER SOURCE(S): MARPAT 134:193741

AB Cell adhesion inhibitors of the general formula R3-L-L'-R1 (R1 = H, C1-10alkyl, C2-10alkenyl or -alkynyl, cycloalkyl, cycloalkylalkyl, -alkenyl, or -alkynyl; L' and L are hydrocarbon linker moieties having 1-5 or 1-14 carbons, resp., which are optionally substituted and interrupted by, or terminally attached to, various groups; R3 = alkyl, cycloalkyl, aryl, aralkyl, aryloxy, arylamino, heterocyclyl, etc.) were prepared An inhibitor of the present invention interacts with VLA-4 mols. to inhibit VLA-4 dependent cell adhesion. Thus, N2-[N-[(3,5-dichlorophenyl)sulfonyl]- L-prolyl]-N4-[N-(o-MePUPA)-N-methyl-L-leucyl]-L-2,4-diaminobutyric acid [o-MePUPA = [4-[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl] was prepared via peptide coupling reactions in solution

IT 327613-20-7P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

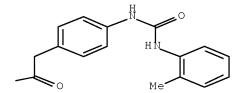
(preparation of peptide derivs. as cell adhesion inhibitors)

RN 327613-20-7 CAPLUS

CN Butanoic acid, 4-[[(2S)-4-methyl-2-[methyl[2-[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]amino]-1-oxopentyl]amino]-2-[[[1-[2-[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 64 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:12273 CAPLUS Full-text

DOCUMENT NUMBER: 134:86271

TITLE: Preparation of pyrimidine derivatives as Src-family

protein tyrosine kinase inhibitor compounds

INVENTOR(S): Armstrong, Helen M.; Beresis, Richard; Goulet, Joung

L.; Holmes, Mark A.; Hong, Xingfang; Mills, Sander G.; Parsons, William H.; Sinclair, Peter J.; Steiner, Mark

G.; Wong, Frederick; Zaller, Dennis M.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 470 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	TENT	NO.			KIN	D	DATE			APPI	LICAT	ION I	NO.		D	ATE	
WO	2001	0002	13		A1	_	 2001	0104		WO 2	2000-1	 US17	443		2	0000	 626
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	, BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	, FI,	GB,	GD,	GE,	GH,	GM,	HR,
		HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	, KΖ,	LC,	LK,	LR,	LS,	LT,	LU,
		LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,
		SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,
		ZA,	ZW,	AM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	, TJ,	TM					
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
		DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG			
CA	2383	546			A1		2001	0104		CA 2	2000-	2383	546		2	0000	626
EP	1206	265			A1		2002	0522		EP 2	2000-	9417	01		2	0000	626
EP	1206	265			В1		2003	1112									
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL							
US	6498	165			В1		2002	1224		US 2	2000-	6043	05		2	0000	626
JP	2003	5239	42		Τ		2003	0812		JP 2	2001-	5059	22		2	0000	626
AT	2539	15			Τ		2003	1115		AT 2	2000-	9417	01		2	0000	626
IORIT	Y APP										1999-					9990	630
										WO 2	2000-1	US17	443	Ţ	W 2	0000	626
HER SO	OURCE	(S):			MARI	PAT	134:	8627	1								

OTHER SOURCE(S): MARPAT 134:86271

GΙ

$$\begin{array}{c} X^{1} \xrightarrow{X^{2}} X^{3} \\ X^{6} \xrightarrow{X^{4}} X^{4} \\ X^{5} \xrightarrow{X^{2}} X^{3} \\ X^{6} \xrightarrow{X^{2}} X^{4} \\ X^{6} \xrightarrow{X^{2}} X^{2} \\ X^{6} \xrightarrow{X^{2}} X^{4} \\ X^{6} \xrightarrow{X^{2}} X^{6} \\ X^{7} \xrightarrow{X^{2}} X^{7} \xrightarrow{X^{2}} X^{7} \\ X^{7} \xrightarrow{X^{2}} X^{7} \\ X^{7} \xrightarrow{X^{2}} X^{7} \\ X^{7} \xrightarrow{X^{2}} X^{7} \\$$

AΒ What are claimed are pyrimidine compds. (shown as I), or their pharmaceutically acceptable salts, hydrates, solvates, crystal forms and individual diastereomers, and pharmaceutical compns. including the same and their use as inhibitors of tyrosine kinase enzymes and consequently their use in the prophylaxis and treatment of protein tyrosine kinase-associated disorders, such as immune diseases, hyperproliferative disorders and other diseases in which inappropriate protein kinase action is believed to play a role, such as cancer, angiogenesis, atherosclerosis, graft rejection, rheumatoid arthritis and psoriasis. In I, R1, R2 = independently H, halo, OH, SH, CN, NO2, alkyl, alkoxy, acyloxy, alkoxycarbonyloxy, carbamoyloxy, alkylthio, sulfinyl, sulfonyl, acyl, alkoxycarbonyl, carbamoyl, amino, acylamino, ureido, sulfamoyl, sulfonylamino, or R1 and R2 can join together to form a fused methylenedioxy ring or a fused 6-membered aromatic ring; terms such as 'alkyl' here and below are further defined in the claims. R3, R5 = independently H, C1-C6-alkyl unsubstituted or substituted with 1-3 substituents, aryl, or R3 and R5 taken together can represent :0; R3 or R5 can represent a 2 or 3 C methylene bridge forming a ring of 5-8 atoms fused to the A ring. R4 = H, C1-C6-alkyl, C1-C6-alkoxyl. X1, X2, X3, X4 in -X1:X2-X3:X4are substituted or unsubstituted CH or N where 0-2 of X1, X2, X3, X4 are N. X5, X6 = independently N, C, optionally substituted CH. A ring = Ph, naphthyl, pyridyl, pyrazinyl, pyrimidinyl, pyrrolyl, thienyl, oxazolyl, isoxazolyl, thiazolyl, pyrazolyl, triazolyl, tetrazolyl, furanyl, benzothienyl, benzofuranyl, indolyl, imidazolyl, benzimidazolyl, thiadiazolyl. R7, R8, R9, R10 = independently H, halo, OH, SH, CN, NO2, N3, N2+BF4-, alkyl, alkoxy, alkylthio, sulfinyl, sulfonyl, C1-C6-alkyl, C1-C6-perfluoroalkyl, acyl, alkoxycarbonyl, carbamoyl, acyloxy, alkoxycarbonyloxy, carbamoyloxy, amino, acylamino, ureido, sulfamoyl, sulfonylamino, two of R7, R8, R9, and R10 when on adjacent carbons join together to form a methylenedioxy bridge. N = 0-2. More than 500 example prepns. are given, but no preparative method is claimed and no data relating to the usefulness of the compds. are given. ΙT 317825-89-1P, 2-[(S)-1-Phenylethylamino]-4-[5-N-((1-tert-

T 317825-89-1P, 2-[(S)-1-Phenylethylamino]-4-[5-N-((1-tert-butyloxycarbonyl-4-phenylpiperidin-4-yl)methyl)aminobenzimidazol-1-yl]pyrimidine

RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of pyrimidine derivs. as Src-family protein tyrosine kinase inhibitor compds.)

RN 317825-89-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[[[1-[2-[[(1S)-1-phenylethyl]amino]-4-pyrimidinyl]-1H-benzimidazol-5-yl]amino]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 65 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2000:894632 CAPLUS Full-text

DOCUMENT NUMBER: 134:157205

TITLE: The design and synthesis of non-peptide somatostatin

receptor agonists

AUTHOR(S): Yang, Lihu; Pan, Yanping; Guo, Liangqin; Morriello,

Greg; Pasternak, Alexander; Rohrer, Susan; Schaeffer,

James; Patchett, Arthur A.

CORPORATE SOURCE: Merck Research Laboratories, Rahway, NJ, 07065, USA

SOURCE: Peptides for the New Millennium, Proceedings of the

American Peptide Symposium, 16th, Minneapolis, MN, United States, June 26-July 1, 1999 (2000), Meeting Date 1999, 250-252. Editor(s): Fields, Gregg B.; Tam, James P.; Barany, George. Kluwer Academic Publishers:

Dordrecht, Neth. CODEN: 69ATHX

DOCUMENT TYPE: Conference LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:157205

The authors have demonstrated that highly potent and selective sst2 agonist can be obtained by derivatizing (2R,3S)-2-Me-Trp-LysOtBu with a variety of privileged structures joined to the dipeptide via a urea linkage. The privileged structure portion of the mol. is very permissive. The use of capped dipeptides to mimic  $\beta$ -turns in peptides is especially noteworthy, and the concept could be useful for the discovery of small mol. ligands of other peptide hormones.

IT 324746-12-5P

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(design and synthesis of non-peptide somatostatin receptor agonists)

RN 324746-12-5 CAPLUS

CN L-Lysine, ( $\beta$ S)-N-[[4-(aminocarbonyl)-4-phenyl-1-piperidinyl]carbonyl]-  $\beta$ -methyl-D-tryptophyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 66 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN L3 ACCESSION NUMBER: 2000:880962 CAPLUS Full-text

DOCUMENT NUMBER: 134:42445

TITLE: Preparation of piperidine amino acid derivatives as

melanocortin-4 receptor agonists

INVENTOR(S): Bakshi, Raman K.; Barakat, Khaled J.; Nargund, Ravi

P.; Palucki, Brenda L.; Patchett, Arthur A.; Sebhat, Iyassu; Ye, Zhixiong; Van, Der Ploeg Leonardus H. T.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA; Van Der Ploeg, Leonardus H. T.

SOURCE: PCT Int. Appl., 124 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.					KINI					APPL	ICAT	ION	NO.		D	ATE		
M(	) 2	000	0746	 79					1214		 WO 2	000-	 US14	930		2	0000	531	
	Ţ	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	ΒA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	
			CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	
			ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	
			MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	
			SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW
	]	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	
			DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	
			CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG				
CZ	A 2	3773	369			A1		2000	1214		CA 2	000-	2377	369		2	0000	531	
EI	CA 2377369 EP 1187614					A1		2002	0320		EP 2	000-	9379	61		2	0000	531	
	]	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	SI,	LT,	LV,	FI,	RO											
JI	2	003	5054	35		Τ		2003	0212		JP 2	001-	5123	28		2	0000	531	
ΑU	J 7	6619	91			В2		2003	1009		AU 2	000-	5306	8		2	0000	531	
US	S 6	350	760			В1		2002	0226		US 2	000-	5851	11		2	0000	601	
US	S 2	002	0137	664		A1		2002	0926		US 2	001-	9904	99		2	0011	121	
ΑU	J 2	0032	2484	56		A1		2003	1106		AU 2	003-	2484	56		2	0030	929	
PRIORI	ry 2	APP]	LN.	INFO	.:						US 1	999-	1374	77P		P 1	9990	604	
											US 1	999-	1692	09P		P 1	9991	202	
											WO 2	000-	US14	930	1	W 2	0000	531	
											US 2	000-	5851	11		A3 2	0000	601	
THER S	SOU	RCE	(S):			MAR	PAT	134:	4244	5									

OTHER SOURCE(S):

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Piperidine derivs. I [R2C2 = aryl, 5- or 6-membered heteroaryl or AΒ heterocyclyl, 5- to 7-membered carbocyclyl, which may be substituted; L =(CRb2)m, where Rb = H, alkyl, (CH2)n-cycloalkyl or -aryl; m = 0-2, n = 0-3; X, Y = (CH2)0-2; Ra = H, alkyl, (CHRb)n-cycloalkyl, -aryl, -heteroaryl, -O(CHRb) naryl, which may be substituted; Re = H, alkyl, (CH2) n-aryl, cycloalkyl, -heteroaryl, which may be substituted, acyl, sulfonyl, etc.; R1 = H, alkyl, (CH2)n-cycloalkyl, -aryl, -heteroaryl, -heterocyclyl; R2 = any group given for R1, CN, (CH2)n-carboxamido, -carboxy, -acylamino, sulfonylamino, amino, etc.] were prepared as agonists of the human melanocortin receptors, in particular, the human melanocortin-4 receptor (MC-4R). They are therefore useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity, diabetes, sexual dysfunction, including erectile dysfunction and female sexual dysfunction. Thus, II trifluoroacetate, prepared by coupling of Et 1-(D-4chlorophenylalanyl)-4- cyclohexyl-4-[(1,2,4-triazol-1-yl)methyl]piperidine trifluoroacetate (preparation given) with N-tert-butoxycarbonyl-1,2,3,4tetrahydroisoquinoline-3- carboxylic acid (Boc-D-Tic), was > 2,200-fold, > 10,000-fold, and > 580-fold selective for the human MC-4R over human MC-1R, MC-2R, and MC-3R, resp.

IT 312637-55-1P 312637-94-8P 312637-95-9P 312637-96-0P 312637-97-1P 312638-06-5P 312638-13-4P 312638-15-6P 312638-28-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperidine amino acid derivs. as melanocortin-4 receptor agonists)

RN 312637-55-1 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[[(methylsulfonyl)amino]methyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]-1,2,3,4-tetrahydro-7-hydroxy-, (3S)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 312637-54-0 CMF C32 H37 C1 N4 O5 S

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 312637-94-8 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[(dimethylamino)carbonyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]decahydro-, hydrochloride (1:1), (3R,4aR,8aR)- (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 312637-95-9 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[(dimethylamino)carbonyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]decahydro-, hydrochloride (1:1), (3R,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 312637-96-0 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[(diethylamino)carbonyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]decahydro-, hydrochloride (1:1), (3R,4aR,8aR)- (CA INDEX NAME)

Absolute stereochemistry.

HC1

RN 312637-97-1 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[(diethylamino)carbonyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]decahydro-, hydrochloride (1:1), (3R,4aS,8aS)- (CA INDEX NAME)

Absolute stereochemistry.

HC1

RN 312638-06-5 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[(ethylamino)carbonyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]decahydro-, (3S, 4aR, 8aR)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 312638-05-4 CMF C33 H43 C1 N4 O3 Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 312638-13-4 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[(dimethylamino)carbonyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]decahydro-, (3S, 4aR, 8aR)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 312638-12-3 CMF C33 H43 C1 N4 O3

Absolute stereochemistry.

CRN 76-05-1 CMF C2 H F3 O2

RN 312638-15-6 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[(diethylamino)carbonyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]decahydro-, (3S, 4aR, 8aR)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 312638-14-5 CMF C35 H47 C1 N4 O3

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 312638-28-1 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[[(methylsulfonyl)amino]methyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]decahydro-, (3S,4aR,8aR)-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 312638-27-0

CMF C32 H43 C1 N4 O4 S

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

IT 312639-14-8P 312639-18-2P 312639-19-3P

312639-20-6P 312639-24-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of piperidine amino acid derivs. as melanocortin-4 receptor agonists)

RN 312639-14-8 CAPLUS

CN Methanesulfonamide, N-[[1-[(2R)-2-amino-3-(4-chlorophenyl)-1-oxopropyl]-4-phenyl-4-piperidinyl]methyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 312639-18-2 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2R)-2-amino-3-(4-chlorophenyl)-1-oxopropyl]-N,N-dimethyl-4-phenyl-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

$$Me_2N \longrightarrow Ph$$

$$NH_2$$

$$C1$$

● HCl

RN 312639-19-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2R)-2-amino-3-(4-chlorophenyl)-1-oxopropyl]-N,N-diethyl-4-phenyl-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

HC1

RN 312639-20-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2R)-2-amino-3-(4-chlorophenyl)-1-oxopropyl]-N-ethyl-4-phenyl-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 312639-24-0 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2R)-2-amino-3-(4-chlorophenyl)-1-oxopropyl]-N-cyclopropyl-4-phenyl-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

HC1

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 67 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2000:314546 CAPLUS Full-text

DOCUMENT NUMBER: 132:321801

TITLE: Preparation of 4-[(benzoylamino)methyl]piperidines and

analogs as potassium channel inhibitors

INVENTOR(S): Bao, Jianming; Kayser, Frank; Kotliar, Andrew;

Parsons, William H.; Rupprecht, Kathleen M.;

Claiborne, Christopher F.; Liverton, Nigel; Claremon,

David A.; Thompson, Wayne J.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 91 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT I	NO.			KIN	D	DATE		1	APPL	ICAT	ION I	. O <i>r</i> .		D	ATE	
WO	2000	 0257	86		A1	_	 2000	0511	1	WO 1	 999-1	US25	 066		1:	9991	026
	W:	ΑE,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,
		CZ,	DE,	DK,	DM,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,
		IN,	IS,	JP,	ΚE,	KG,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,
		MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,
		SL,	ΤJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW		
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,
		DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG				
US	6303	637			В1		2001	1016	1	US 1	999-	4225	00		1	9991	021
CA	2348	735			A1		2000	0511	(	CA 1	999-	2348	735		1:	9991	026
CA	2348	735			С		2007	1211									
EP	1126	849			A1		2001	0829		EP 1	999-	9551	69		1:	9991	026
ΕP	1126	849			В1		2005	0309									
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO										
JР	2002	5285	03		Τ		2002	0903		JP 2	000-	5792	27		1:	9991	026

AU 764515	В2	20030821	AU	2000-11338		19991026
AT 290382	Τ	20050315	ΑT	1999-955169		19991026
PRIORITY APPLN. INFO.:			US	1998-106292P	P	19981030
			WO	1999-US25066	W	19991026

OTHER SOURCE(S): MARPAT 132:321801

GΙ

$$\begin{array}{c}
\mathbb{R}^{1} \xrightarrow{\mathbb{R}^{2}} \mathbb{Z}^{2} \\
\mathbb{Z}^{1} \\
\mathbb{Z}^{2} \\
\mathbb{R}^{4}
\end{array}$$

AB Title compds. [I; R1 = CH2NR10COR6; R2,R6 = (un)substituted Ph; R3,R4 = H, halo, alkyl, acyl, etc.; R10 = H, alkyl, acyl, etc.; Z = O, SOO-2, NR5; R5 = H, OH, alkyl, acyl, etc.; Z1,Z2 = bond, CH2, CH2CH2] were prepared as potassium channel inhibitors (no data). Thus, 4-cyano-1-benzyl-4-phenylpiperidine was reduced and the product N-acylated by 2-(MeO)C6H4COCl to give, after deprotection and Ac2O acylation, 2-(MeO)C6H4CONHCH2Z3Ac (Z3 = 4-phenylpiperidine-4,1-diyl).

IT 266341-26-8P 266341-27-9P 266341-28-0P 266341-29-1P 266341-30-4P 266341-31-5P 266341-32-6P 266341-33-7P 266341-34-8P 266341-35-9P 266341-36-0P 266341-37-1P 266341-38-2P 266341-39-3P 266341-40-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 4-[(benzoylamino)methyl] piperidines and analogs as potassium channel inhibitors)

RN 266341-26-8 CAPLUS

CN Benzamide, N-[(1-acetyl-4-phenyl-4-piperidinyl)methyl]-2-methoxy- (CA INDEX NAME)

RN 266341-27-9 CAPLUS

CN Benzamide, 2-methoxy-N-[[1-(1-oxobutyl)-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME)

$$\bigcap_{\mathsf{OMe}} \bigcap_{\mathsf{C-NH-CH}} \bigcap_{\mathsf{C-Pr-n}} \bigcap_$$

RN 266341-28-0 CAPLUS

CN Benzamide, 2-methoxy-N-[[1-(1-oxohexyl)-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 266341-29-1 CAPLUS

CN Benzamide, 2-methoxy-N-[[1-(1-oxooctyl)-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 266341-30-4 CAPLUS

CN Benzamide, 2-methoxy-N-[[1-(1-oxodecyl)-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 266341-31-5 CAPLUS

CN Benzamide, N-[(1-benzoyl-4-phenyl-4-piperidinyl)methyl]-2-methoxy- (CA INDEX NAME)

RN 266341-32-6 CAPLUS

CN Benzamide, 2-methoxy-N-[[4-phenyl-1-(2-phenylacetyl)-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 266341-33-7 CAPLUS

CN Benzamide, N-[[1-(2,2-diphenylacetyl)-4-phenyl-4-piperidinyl]methyl]-2-methoxy- (CA INDEX NAME)

RN 266341-34-8 CAPLUS

CN Benzamide, 2-methoxy-N-[[1-(1-oxo-3-phenylpropyl)-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME)

RN 266341-35-9 CAPLUS

CN 1-Piperidinebutanoic acid, 4-[[(2-methoxybenzoyl)amino]methyl]- $\gamma$ -oxo-4-phenyl-, methyl ester (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 266341-36-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(2-methoxybenzoyl)amino]methyl]-4-phenyl-, methyl ester (CA INDEX NAME)

RN 266341-37-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(2-methoxybenzoyl)amino]methyl]-4-phenyl-, ethyl ester (CA INDEX NAME)

RN 266341-38-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(2-methoxybenzoyl)amino]methyl]-4-phenyl-, 2-propen-1-yl ester (CA INDEX NAME)

RN

CN 1-Piperidinecarboxylic acid, 4-[[(2-methoxybenzoyl)amino]methyl]-4-phenyl-, butyl ester (CA INDEX NAME)

RN 266341-40-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(2-methoxybenzoyl)amino]methyl]-4-phenyl-, phenylmethyl ester (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 68 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2000:68365 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 132:122932

TITLE: Preparation of peptides, peptidomimetics, and

nonpeptides as medical and agrochemical antifungals. INVENTOR(S): Bergnes, Gustave; Berlin, Vivian; Come, Jon; Kluge,

Arthur; Murthi, Krishna; Pal, Kollol

PATENT ASSIGNEE(S): Mitotix, Inc., USA SOURCE: PCT Int. Appl., 287 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO			KIN	)	DATE			APPL	ICAT	ION I	NO.		D	ATE	
WO 200000			A2 A3		2000 2001		,	WO 1	 999-1	JS16	146		19	9990	715
W: A	DE, DK, E		AT,	AU,	AZ,	BA,			•	•	•	•			
J	P, KE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,
Т	M, TR,	TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW	·	·	·	·	
E	SH, GM, SS, FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	•	•			
C	I. CM.	GA,	GN.	GW.	ML.	MR,	NE.	SN.	TD.	ΤG					

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US 6423519
                         В1
                                 20020723 US 1998-172845
                                                                      19981015
     CA 2335381
                          A1
                                 20000127
                                            CA 1999-2335381
                                                                      19990715
     AU 9951075
                          Α
                                 20000207 AU 1999-51075
                                                                      19990715
     EP 1096925
                          Α2
                                 20010509
                                              EP 1999-935639
                                                                      19990715
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     JP 2002520372
                                 20020709
                                              JP 2000-559877
                                                                      19990715
                                              US 1998-115846 A 19980715
US 1998-172845 A 19981015
WO 1999-US16146 W 19990715
PRIORITY APPLN. INFO.:
OTHER SOURCE(S):
                    MARPAT 132:122932
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$$\begin{array}{c} \text{HS} \\ \text{H}_2\text{N} \end{array} \begin{array}{c} \text{H} \\ \text{N} \end{array} \begin{array}{c} \text{Ph} \\ \text{N} \end{array} \begin{array}{c} \text{CO}_2\text{H} \end{array}$$

GΙ

AB A method for inhibiting the growth of a fungal pathogen comprises contacting the pathogen with a compound, e.g., (R70)2NCH[(CH2)nR]C(Xa)NHCHR7 2C(Xb)NHCHR73C(Xc)NHCHR10CO2R11 [Xa, Xb, Xc = 0, H2; R = SR1, SOR111, SO2R111; R1 = H, alkyl, alkenyl, aryl, acyl; R10 = alkyl, alkenyl, alkynyl, aryl, cycloalkyl, hydroxyalkyl, amino acid sidechain, etc.; R11 = H, blocking group, pharmaceutically acceptable salt; R10R11 = atoms to form 5-7 membered ring; R111 = alkyl, alkenyl, (CH2)mR7; R70 = H, alkyl, alkenyl, alkynyl, aryl, acyl, amino acid sidechain, etc.; R72, R73 = H, alkyl, aryl, heteroaryl, amino acid sidechain, (CH2)mR7, etc.; m, n = 0-4], which inhibits prenyl transferase activity with MIC50<25  $\mu$ g/mL. Thus, title compound (I) (solution phase preparation given) inhibited GGTase with IC50<10 nM.

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256367-55-2P 256367-56-3P 256367-57-4P
ΤТ
     256367-58-5P 256367-59-6P 256367-60-9P
     256367-61-0P 256367-62-1P 256367-63-2P
     256367-64-3P 256367-65-4P 256367-66-5P
     256367-67-6P 256367-68-7P 256367-69-8P
     256367-70-1P 256367-71-2P 256367-72-3P
     256367-73-4P 256367-74-5P 256367-75-6P
     256367-76-7P 256367-77-8P 256367-78-9P
     256367-79-0P 256367-80-3P 256367-81-4P
     256367-94-9P 256368-00-0P 256368-01-1P
     256368-02-2DP, alkyl esters 256368-02-2P
     256370-06-6P 256384-54-0P
     RL: AGR (Agricultural use); BAC (Biological activity or effector, except
     adverse); BSU (Biological study, unclassified); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
```

(preparation of peptides, peptidomimetics, and nonpeptides as medical and agrochem. antifungals)

RN 256367-55-2 CAPLUS

CN L-Leucine, D-cysteinyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX

NAME)

Absolute stereochemistry.

RN 256367-56-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-([1,1'-biphenyl]-2-ylmethyl)-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-57-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-(3-methylbutyl)-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-58-5 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl-N-[2-(2-thienyl)ethyl]- (CA INDEX NAME)

RN 256367-59-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-([1,1'-biphenyl]-3-ylmethyl)-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-60-9 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-[3-(4-morpholinyl)propyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-61-0 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl-N-[2-(1-pyrrolidinyl)ethyl]- (CA INDEX NAME)

RN 256367-62-1 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-(1H-benzimidazol-2-ylmethyl)-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-63-2 CAPLUS

CN 4-Piperidinecarboxamide, N-[1-(aminocarbonyl)-3-methylbutyl]-1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-64-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-[3-(1H-imidazol-1-yl)propyl]-4-phenyl- (CA INDEX NAME)

RN 256367-65-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl-N-(4-pyridinylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-66-5 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-67-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-[2-[4-(aminosulfonyl)phenyl]-thyl]-4-phenyl- (CA INDEX NAME)

RN 256367-68-7 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-[2-(2-naphthalenylamino)-2-oxoethyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-69-8 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl-N-[[3-(trifluoromethoxy)phenyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-70-1 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-(1,3-benzodioxol-5-ylmethyl)-4-phenyl- (CA INDEX NAME)

RN 256367-71-2 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-[(2,4-difluorophenyl)methyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-72-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-cyclohexyl-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-73-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl-N-[(tetrahydro-2-furanyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-74-5 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-[(2-methoxyphenyl)methyl]-4-phenyl- (CA INDEX NAME)

RN 256367-75-6 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl-N-(2-phenylcyclopropyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-76-7 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-(1-naphthalenylmethyl)-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-77-8 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-[2-[[2-(2-chloro-6-fluorophenyl)ethyl]thio]ethyl]-4-phenyl- (CA INDEX NAME)

RN 256367-78-9 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-(2,2-diphenylethyl)-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-79-0 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-9H-fluoren-9-yl-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-80-3 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl-N-(4-phenylbutyl)- (CA INDEX NAME)

RN 256367-81-4 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-4-phenyl-N-(phenylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 256367-94-9 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-3-amino-2-[[(2R)-2-amino-3-mercapto-1-oxopropyl]amino]-1-oxopropyl]-4-phenyl-N-(4-pyridinylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-00-0 CAPLUS

CN 4-Piperidinecarboxamide, 1-(L-alanyl-L-cysteinyl)-4-phenyl-N-(4-pyridinylmethyl)- (9CI) (CA INDEX NAME)

RN 256368-01-1 CAPLUS

CN L-Alaninamide, L-alanyl-N-[(1R)-1-(mercaptomethyl)-2-oxo-2-[4-phenyl-4-[[(4-pyridinylmethyl)amino]carbonyl]-1-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-02-2 CAPLUS

CN L-Alanine, L-cysteinyl-4-phenyl-4-piperidinecarbonyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-02-2 CAPLUS

CN L-Alanine, L-cysteinyl-4-phenyl-4-piperidinecarbonyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

CN L-Alanine, L-cysteinyl-4-phenyl-4-piperidinecarbonyl-L-leucyl-L-alanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256384-54-0 CAPLUS

CN 4-Piperidinecarboxamide, 1-[(2S)-2-amino-3-mercapto-1-oxopropyl]-N-[(4-cyanocyclohexyl)methyl]-4-phenyl- (CA INDEX NAME)

Absolute stereochemistry.

IT 256369-45-6 256369-48-9 256369-49-0 256369-60-5 256369-71-8 256369-72-9

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of peptides, peptidomimetics, and nonpeptides as medical and agrochem. antifungals)

RN 256369-45-6 CAPLUS

CN Benzeneacetic acid,  $\alpha$ -[[[1-(2-amino-3-mercapto-1-oxopropyl)-4-phenyl-4-piperidinyl]carbonyl]amino]-, ( $\alpha$ S)- (CA INDEX NAME)

Absolute stereochemistry.

$$\mathsf{HO_{2}C} \underbrace{\mathsf{S}}_{\mathsf{Ph}} \overset{\mathsf{H}}{\underset{\mathsf{Ph}}{\mathsf{N}}} \underbrace{\mathsf{N}}_{\mathsf{Ph}} \overset{\mathsf{O}}{\underset{\mathsf{Ph}}{\mathsf{N}}} \mathsf{SH}$$

RN 256369-48-9 CAPLUS

CN L-Alanine, cysteinyl-4-phenyl-4-piperidinecarbonyl-(2S)-2-phenylglycyl-

Absolute stereochemistry.

RN 256369-49-0 CAPLUS

CN L-Leucine, cysteinyl-4-phenyl-4-piperidinecarbonyl-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256369-60-5 CAPLUS

CN L-Alanine, cysteinyl-4-phenyl-4-piperidinecarbonyl-L-leucyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256369-71-8 CAPLUS

CN D-Alanine, cysteinyl-4-phenyl-4-piperidinecarbonyl-L-leucyl-L-alanyl-, methyl ester (9CI) (CA INDEX NAME)

RN 256369-72-9 CAPLUS

CN 4-Piperidinecarboxamide, 1-(2-amino-3-mercapto-1-oxopropyl)-4-phenyl-N-(4-pyridinylmethyl)- (CA INDEX NAME)

IT 256368-41-9 256368-42-0 256368-43-1 256368-44-2 256368-45-3 256368-46-4 256368-47-5 256368-48-6 256368-49-7 256368-50-0 256368-51-1 256368-52-2 256368-56-6 256368-57-7 256368-55-5 256368-59-9 256368-60-2 256368-61-3 256368-62-4 256368-63-5 256368-64-6 256368-77-1 256368-66-8 256368-72-6 256368-77-1 256368-78-2 256368-79-3 256384-55-1

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of peptides, peptidomimetics, and nonpeptides as medical and agrochem. antifungals)

RN 256368-41-9 CAPLUS

CN L-Leucine, N-[(1,1-dimethylethoxy)carbonyl]-S-(triphenylmethyl)-D-cysteinyl-4-phenyl-4-piperidinecarbonyl-, methyl ester (9CI) (CA INDEX NAME)

CN Carbamic acid, [(1S)-2-[4-[[([1,1'-biphenyl]-2-ylmethyl)amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-43-1 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[(3-methylbutyl)amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-44-2 CAPLUS

CN Carbamic acid, [(1S)-2-oxo-2-[4-phenyl-4-[[[2-(2-thienyl)ethyl]amino]carbonyl]-1-piperidinyl]-1[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-45-3 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[([1,1'-biphenyl]-3-ylmethyl)amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-,

1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-46-4 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[[3-(4-morpholinyl)propyl]amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-47-5 CAPLUS

CN Carbamic acid, [(1S)-2-oxo-2-[4-phenyl-4-[[[2-(1-pyrrolidinyl)ethyl]amino]carbonyl]-1-piperidinyl]-1[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-48-6 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[(1H-benzimidazol-2-ylmethyl)amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-49-7 CAPLUS

CN Leucinamide, N-[(1,1-dimethylethoxy)carbonyl]-S-(triphenylmethyl)-D-cysteinyl-4-phenyl-4-piperidinecarbonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-50-0 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[[3-(1H-imidazol-1-yl)propyl]amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-51-1 CAPLUS

CN Carbamic acid, [(1S)-2-oxo-2-[4-phenyl-4-[[(4-pyridinylmethyl)amino]carbonyl]-1-piperidinyl]-1[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 256368-52-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[1-[(2S)-2-[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxo-3-[(triphenylmethyl)thio]propyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-53-3 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[[2-[4-(aminosulfonyl)phenyl]ethyl]amino]carbon yl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-54-4 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[[2-(2-naphthalenylamino)-2-oxoethyl]amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 256368-55-5 CAPLUS

CN Carbamic acid, [(1S)-2-oxo-2-[4-phenyl-4-[[[[3-(trifluoromethoxy)phenyl]methyl]amino]carbonyl]-1-piperidinyl]-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-56-6 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[(1,3-benzodioxol-5-ylmethyl)amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-57-7 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[[(2,4-difluorophenyl)methyl]amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 256368-58-8 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[(cyclohexylamino)carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-59-9 CAPLUS

CN Carbamic acid, [(1S)-2-oxo-2-[4-phenyl-4-[[[(tetrahydro-2-furanyl)methyl]amino]carbonyl]-1-piperidinyl]-1[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-60-2 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[(2-methoxyphenyl)methyl]amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 256368-61-3 CAPLUS
CN Carbamic acid, [(1S)-2-oxo-2-[4-phenyl-4-[[(2-phenylcyclopropyl)amino]carbonyl]-1-piperidinyl]-1[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-62-4 CAPLUS
CN Carbamic acid, [(1S)-2-[4-[[(1-naphthalenylmethyl)amino]carbonyl]-4-phenyl1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-63-5 CAPLUS
CN Carbamic acid, [(1S)-2-[4-[[[2-[[2-(2-chloro-6-fluorophenyl)ethyl]thio]ethyl]amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 256368-64-6 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[[(2,2-diphenylethyl)amino]carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-65-7 CAPLUS

CN Carbamic acid, [(1S)-2-[4-[(9H-fluoren-9-ylamino)carbonyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

256368-66-8 CAPLUS

RN

CN Carbamic acid, [(1S)-2-oxo-2-[4-phenyl-4-[[(4-phenylbutyl)amino]carbonyl]-1-piperidinyl]-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-72-6 CAPLUS

CN Carbamic acid, [(1R)-2-[[(1S)-1-[[(1,1-dimethylethoxy)carbonyl]amino]methyl]-2-oxo-2-[4-phenyl-4-[[(4-pyridinylmethyl)amino]carbonyl]-1-piperidinyl]ethyl]amino]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 256368-77-1 CAPLUS

CN Carbamic acid, [(1R)-2-oxo-2-[4-phenyl-4-[[(4-pyridinylmethyl)amino]carbonyl]-1-piperidinyl]-1[[(triphenylmethyl)thio]methyl]ethyl]-, 9H-fluoren-9-ylmethyl ester (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 256368-78-2 CAPLUS

CN L-Alanine, N-[(1,1-dimethylethoxy)carbonyl]-S-(triphenylmethyl)-L-cysteinyl-4-phenyl-4-piperidinecarbonyl-L-leucyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

256368-79-3 CAPLUS RN

CN L-Alanine, N-[(1,1-dimethylethoxy)carbonyl]-S-(triphenylmethyl)-Lcysteinyl-4-phenyl-4-piperidinecarbonyl-L-leucyl-L-alanyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

256384-55-1 CAPLUS RN

CN Carbamic acid, [(1S)-2-[4-[[[(4-cyanocyclohexyl)methyl]amino]carbonyl]-4phenyl-1-piperidinyl]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 69 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1999:350649 CAPLUS Full-text

DOCUMENT NUMBER: 130:352550

TITLE: Synthesis of 4-substituted 4-piperidinecarboxamide

> derivatives as cell adhesion inhibitors Delaszlo, Stephen E.; Hagmann, William K.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA PCT Int. Appl., 71 pp.

CODEN: PIXXD2

SOURCE:

INVENTOR(S):

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	PATENT NO.						DATE		APPLICATION NO.						DATE			
WO	9925685				A1 19990527			WO 1998-US24513						19981116				
	W:	AL,	AM,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BR,	BY,	CA,	CN,	CU,	CZ,	EE,	GD,	GE,	
		HR,	HU,	ID,	IL,	IS,	JP,	KG,	KR,	KΖ,	LC,	LK,	LR,	LT,	LV,	MD,	MG,	
		MK,	MN,	MX,	NO,	ΝZ,	PL,	RO,	RU,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	
		UA,	US,	UZ,	VN,	YU,	AM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM			
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	
		FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	
		CM,	GA,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG							
US	US 6020347						2000	0201		US 1	998-		19981113					
AU	Α		1999	0607		AU 1	999-	1415		19981116								
PRIORIT						US 1	.997-	6591	7P		P 1	9971	118					
									GB 1	.997-:	2721	4		A 1	9971	223		
										WO 1	.998-1	JS24	513	,	W 1	9981	116	

OTHER SOURCE(S): MARPAT 130:352550

GΙ

$$\begin{array}{c}
R^2 \\
\text{CONR} 3 \text{ CR} 4 \text{R5} \text{XZ}
\end{array}$$

4-Substituted 4-piperidinecarboxamides I [L = CO, OCO, NHCO or substituted iminocarbonyl, SO2, P(0)OR4, COCO; X is a bond, CH2 or substituted methylene; Z = CO2H, PO3H2, PH(0)OH, SOH, SO2H, SO3H or their esters, CONH2 or substituted carboxamido, 5-tetrazolyl; R1, R2 = (un)substituted alkyl, alkenyl, alkynyl, Cy (cycloalkyl, heterocycloalkyl, aryl, heteroaryl); Cy-alkyl, Cy-alkenyl, or Cy-alkynyl; R3 = H, (un)substituted alkyl or Cy; R4 = H or (un)substituted alkyl, alkenyl, alkynyl, Cy, or Cy-alkyl; R5 = H, (un)substituted alkyl, alkenyl, alkynyl, Cy-(Cy1)p (Cy1 same definition as Cy, p = 0, 1), Cy-(Cy1)p-alkyl, -alkenyl, or -alkynyl] were prepared as antagonists of VLA-4 and/or  $\alpha 4\beta 7$  and as such are useful in the inhibition or prevention of cell adhesion and cell-adhesion mediated pathologies. Thus, N-[4-methyl-1-[4-(N'-2- methylphenylureido)phenylacetyl]piperidinyl-4-carbonyl]-L-4- fluorophenylalanine was prepared from L-4-fluorophenylalanine tert-Bu ester via 2-step N-acylation in solution

IT 225240-06-2P 225240-07-3P 225240-08-4P 225240-09-5P 225240-10-8P 225240-11-9P 225240-12-0P 225240-13-1P 225240-14-2P 225240-15-3P 225240-16-4P 225240-17-5P 225240-18-6P 225240-19-7P 225240-20-0P 225240-21-1P 225240-22-2P 225240-23-3P 225240-24-4P 225240-25-5P 225240-29-9P 225240-30-2P 225240-33-5P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis of piperidinecarboxamide derivs. as cell adhesion inhibitors)

RN 225240-06-2 CAPLUS

CN Heptanoic acid, 2-[[[1-[2-[4-[[[(2-methylphenyl)amino]carbonyl]amino]pheny l]acetyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 225240-07-3 CAPLUS

CN L-Phenylalanine, N-[[1-[[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl] acetyl]-4-phenyl-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 225240-08-4 CAPLUS

CN Benzeneacetic acid,  $\alpha$ -[[[1-[2-[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]-4-phenyl-4-piperidinyl]carbonyl]amino]- (CA INDEX NAME)

RN 225240-09-5 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid,  $\alpha$ -[[1-[2-[4-[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-, ( $\alpha$ S)- (CA INDEX NAME)

RN 225240-10-8 CAPLUS

CN Butanoic acid, 3-[[[1-[2-[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]-4-phenyl-4-piperidinyl]carbonyl]amino]- (CA INDEX NAME)

RN 225240-11-9 CAPLUS

CN Benzenebutanoic acid,  $\beta$ -[[[1-[2-[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]-4-phenyl-4-piperidinyl]carbonyl]amino]- (CA INDEX NAME)

RN 225240-12-0 CAPLUS

CN Hexanoic acid, 5-methyl-3-[[[1-[2-[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]-4-phenyl-4-piperidinyl]carbonyl]amino]- (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{NH} \\ \text{C} \\ \text{NH} \end{array}$$

RN 225240-13-1 CAPLUS

CN Benzenepropanoic acid,  $\beta$ -[[[1-[2-[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]-4-phenyl-4-

piperidinyl]carbonyl]amino]- (CA INDEX NAME)

RN 225240-14-2 CAPLUS

CN Propanoic acid, 2-methyl-3-[[[1-[2-[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]-4-phenyl-4-piperidinyl]carbonyl]amino]- (CA INDEX NAME)

RN 225240-15-3 CAPLUS

CN L-Tyrosine, O-(1,1-dimethylethyl)-N-[[1-[[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]-4-phenyl-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

**─**OBu-t

RN 225240-16-4 CAPLUS

Absolute stereochemistry.

RN 225240-17-5 CAPLUS

CN D-Phenylalanine, N-[[1-[[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl] acetyl]-4-phenyl-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 225240-18-6 CAPLUS

CN L-Phenylalanine, 4-fluoro-N-[[1-[[4-[[[(2-methylphenyl)amino]carbonyl]amin o]phenyl]acetyl]-4-phenyl-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

RN 225240-19-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[((1S)-1-carboxy-2-(4-fluorophenyl)ethyl]amino]carbonyl]-4-phenyl-, 1-(9H-fluoren-9-ylmethyl) ester (CA INDEX NAME)

Absolute stereochemistry.

RN 225240-20-0 CAPLUS

CN L-Phenylalanine, N-[(1-benzoyl-4-phenyl-4-piperidinyl)carbonyl]-4-fluoro-(CA INDEX NAME)

Absolute stereochemistry.

RN 225240-21-1 CAPLUS

CN L-Phenylalanine, 4-fluoro-N-[[4-phenyl-1-(phenylacetyl)-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

RN 225240-22-2 CAPLUS

CN L-Phenylalanine, 4-fluoro-N-[[4-phenyl-1-[(phenylamino)carbonyl]-4-piperidinyl]carbonyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 225240-23-3 CAPLUS

CN L-Phenylalanine, N-[[1-[[4-(benzoylamino)phenyl]acetyl]-4-phenyl-4-piperidinyl]carbonyl]-4-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 225240-24-4 CAPLUS

CN L-Phenylalanine, 4-fluoro-N-[[4-phenyl-1-[[4-[(phenylacetyl)amino]phenyl]a cetyl]-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

RN 225240-25-5 CAPLUS

CN L-Phenylalanine, 4-fluoro-N-[[1-[[4-[[(2-methylphenyl)acetyl]amino]phenyl] acetyl]-4-phenyl-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 225240-26-6 CAPLUS

CN L-Phenylalanine, 4-fluoro-N-[[4-phenyl-1-[[4-[[(phenylamino)carbonyl]amino]phenyl]acetyl]-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 225240-27-7 CAPLUS

CN L-Phenylalanine, 4-fluoro-N-[[1-[[4-[[(3-methylphenyl)amino]carbonyl]amin o]phenyl]acetyl]-4-phenyl-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

PAGE 1-B

 $\sim_{\mathbb{F}}$ 

RN 225240-28-8 CAPLUS

CN L-Phenylalanine, 4-fluoro-N-[[1-[[4-[[(4-methylphenyl)amino]carbonyl]amin o]phenyl]acetyl]-4-phenyl-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

~ F

RN 225240-29-9 CAPLUS

CN L-Phenylalanine, 4-fluoro-N-[[1-[[4-[(phenoxycarbonyl)amino]phenyl]acetyl]-4-phenyl-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 225240-30-2 CAPLUS

CN L-Aspartic acid, N-[[1-[[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl] acetyl]-4-phenyl-4-piperidinyl]carbonyl]-, 4-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 225240-31-3 CAPLUS

CN L-Lysine, N6-[(1,1-dimethylethoxy)carbonyl]-N2-[[1-[[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]-4-phenyl-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

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RN 225240-32-4 CAPLUS

CN L-Serine, O-(1,1-dimethylethyl)-N-[[1-[[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]-4-phenyl-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 225240-33-5 CAPLUS

CN L-Aspartic acid, N-[[1-[[4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl] acetyl]-4-phenyl-4-piperidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 70 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN L3 ACCESSION NUMBER: 1999:113709 CAPLUS Full-text

DOCUMENT NUMBER: 130:153983

TITLE: Preparation of N-sulfonylated aminophenylalanine

dipeptide derivatives and analogs as inhibitors of

leukocyte adhesion mediated by VLA-4

INVENTOR(S): Ashwell, Susan; Grant, Francine S.; Konradi, Andrei

> W.; Kreft, Anthony; Lombardo, Louis John; Pleiss, Michael A.; Sarantakis, Dimitrios; Semko, Christopher

Ι

M.; Thorsett, Eugene D.

PATENT ASSIGNEE(S): Athena Neurosciences, Inc., USA; American Home

Products Corporation

SOURCE: PCT Int. Appl., 164 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT	NO.			KIN	D	DATE		APPLICATION NO.					DATE			
WO	9906	 434			 A1		19990211			WO 1998-US15312					1	9980	 730
	W:	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BF	R, BY	, CA,	CH,	CN,	CU,	CZ,	DE,
		DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	HF	R, HU	, ID,	IL,	IS,	JP,	KΕ,	KG,
		KP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	LU	J, LV	, MD,	MG,	MK,	MN,	MW,	MX,
		NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG	G, SI	, SK,	SL,	ΤJ,	TM,	TR,	TT,
		UA,	UG,	US,	UZ,	VN,	YU,	ZW									
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	UG,	ZW	I, AT	, BE,	CH,	CY,	DE,	DK,	ES,
		FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NI	, PT	, SE,	BF,	ΒJ,	CF,	CG,	CI,
		CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	ΤD	, TG						
CA	2290							CA 1998-2290750					19980730				
AU	9885			A 19990222					ΑU	1998	-8584		19980730				
ZA	9806			A 20000502					ZA	1998	-6837		19980730				
EP	1001			A1 20000524					EP 1998-937049						9980	730	
EΡ	1001974				B1 20060524												
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	R, IT	, LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FΙ,	RO,	CY									
BR	9812			A 20000718									19980730				
HU	2000	0045	31		A2 20010428				HU	2000	-4531		19980730				
JΡ	2003	24		Τ	T 20030527				JP 2000-505189					19980730			
AT	3272			Τ	T 20060615				AT 1998-937049					19980730			
MX	2000	Α	20011031				MX 2000-680					20000119					
NO 2000000411					Α		2000	0328		ИО	2000	-411			2	0000	127
ORITY APPLN. INFO.:										US	1997	-9203	53	,	A1 1	9970	731
										WO	1998	-US15	312		W 1	9980	730
ED COUDCE(C).						MADDAT 130.1530											

OTHER SOURCE(S): MARPAT 130:153983

GΙ

AΒ Disclosed are title compds. R1SO2NR2CHR3QCHR5COR6 [R1 = (un)substituted alkyl, (un) substituted aryl, (un) substituted cycloalkyl, (un) substituted heterocyclyl; R2 = H, any group R1; R1R2 may form (un)substituted heterocyclic ring; R3 = H, any group R1; R2R3 may form (un) substituted heterocyclic ring; R5 = (CH2)x-Ar-R5'; R5' = NR12C(Z)NR8R8', NR12C(Z)R13; R12 = H, alkyl, aryl;R8, R8' = independently H, any group R1; R8R8' may form heterocyclic ring; R13 = saturated heterocycle; Z = 0, S, NR13; x = 1-4; , (CH2)n-heteroaryl; n = 1-4; Q = C(X)NR7; R7 = H, alkyl; X = O, S; R6 = NH2, (un)substituted alkoxy, (un) substituted cycloalkoxy, succinimidyloxy, adamantylamino,  $\beta$ -cholest-5-en-3-yloxy, NHOY, NH(CH2)pCO2Y, OCH2NR9R10; Y = H, (un)substituted alkyl, (un) substituted aryl; p = 1-8; R9 = (un) substituted CO-aryl; R10 = H, CH2CO2R11, NHSO2Z; R11 = alkyl; Z = (un)substituted alkyl, (un)substituted cycloalkyl, (un)substituted aryl, (un)substituted heteroaryl, (un)substituted heterocyclyl; and pharmaceutically acceptable salts thereof, with provisos] which bind VLA-4 (also referred to as integrin  $\alpha 4\beta 1$  and CD49d/CD29). Certain of these compds. also inhibit leukocyte adhesion and, in particular, leukocyte adhesion mediated by VLA-4. Such compds. are useful in the treatment of inflammatory diseases in a mammalian patient, e.g., human, wherein the disease may be, for example, asthma, Alzheimer's disease, atherosclerosis, AIDS dementia, diabetes, inflammatory bowel disease, rheumatoid arthritis, tissue transplantation, tumor metastasis and myocardial ischemia. The compds. can also be administered for the treatment of inflammatory brain diseases such as multiple sclerosis. Thus, condensation of N-tosyl-L-prolyl-4-amino-Lphenylalanine Me ester with 3-phenylpropyl isothiocyanate gave the corresponding urea I.

IT 220149-61-1P 220149-67-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-sulfonylated aminophenylalanine dipeptide derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4)

RN 220149-61-1 CAPLUS

CN L-Phenylalanine, 1-[(4-methylphenyl)sulfonyl]-L-prolyl-4-[[[1-[(1,1-dimethylethoxy)carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220149-67-7 CAPLUS

CN L-Phenylalanine, 1-[(4-methylphenyl)sulfonyl]-L-prolyl-4-[[[1-[(1,1-dimethylethoxy)carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 71 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1998:689192 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 129:330656

ORIGINAL REFERENCE NO.: 129:67439a,67442a

TITLE: Preparation of 1-(3-pyrrolidinylalkyl)-4-

piperidinecarboxamides as tachykinin antagonists

INVENTOR(S): Burkholder, Timothy P.; Kudlacz, Elizabeth M.; Le

Tieu-bihn; Maynard, George D.

PATENT ASSIGNEE(S): Hoechst Marion Roussel Inc., USA

SOURCE: U.S., 93 pp., Cont.-in-part of U.S. 5,635,510.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 5824690	A	19981020	US 1997-798664		19970211
ZA 9403091	А	19950112	ZA 1994-3091		19940504
US 5635510	A	19970603	US 1994-332027		19941031
PRIORITY APPLN. INFO.:			US 1993-58606	В2	19930506
			US 1994-225371	В2	19940419
			US 1994-332027	A2	19941031

OTHER SOURCE(S): MARPAT 129:330656

GΙ

$$Y^1$$
  $Y^2$   $X^2$   $X^3$   $X^4$   $X^4$ 

AB Title compds. [I; R = G2(CH2)nR2; G1,G2 = CH2 or CO; R1 = (un)substituted Ph, -naphthyl, pyridyl, etc.; R2 = (un)substituted Ph or -pyridyl; Y1 = CONHR5 or CONR6R7; R5 = H, alkyl, (CH2)qNR6R7, etc.; R6,R7 = alkyl; NR6R7 =

heterocyclyl; Y2 = (un)substituted phenyl(methyl), -pyridyl, -thienyl; Y1Y2 = atoms to complete a ring; Z = (CH2)2-3; n = 0 or 1; q = 2 or 3] were prepared Thus, 3,4-Cl2C6H3CH2CN was biscondensed with BrCH2CO2Et and the reduced product cyclized to give, after reduction and N-benzoylation, 1-benzoyl-3-(2-hydroxyethyl)-3-(3,4-dichlorophenyl)pyrrolidine. The latter was treated with MeSO2Cl and the product aminated by 4-phenylpiperidine-4-carboxamide (preparation given) to give I (G1 = CH2, R = Bz, R1 = C6H3Cl2-3,4, Y1 = CONH2, Y2 = Ph, Z = CH2CH2). Data for biol. activity of I were given.

IT 167262-69-3P 167263-14-1P 167263-16-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 1-(3-pyrrolidinylalkyl)-4-piperidinecarboxamides as tachykinin antagonists)

RN 167262-69-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminocarbonyl)-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 167263-14-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(methylamino)carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 167263-16-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(dimethylamino)carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 72 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:642712 CAPLUS Full-text

DOCUMENT NUMBER: 130:32676

TITLE: 4,4-Disubstituted Piperidine High-Affinity NK1

Antagonists: Structure-Activity Relationships and in

Vivo Activity

AUTHOR(S): Stevenson, Graeme I.; Huscroft, Ian; MacLeod, Angus

M.; Swain, Christopher J.; Cascieri, Margaret A.; Chicchi, Gary G.; Graham, Michael I.; Harrison,

Timothy; Kelleher, Fintan J.; Kurtz, Marc;

Ladduwahetty, Tamara; Merchant, Kevin J.; Metzger, Joseph M.; MacIntyre, D. E.; Sadowski, Sharon; Sohal,

Balbinder; Owens, Andrew P.

CORPORATE SOURCE: Department of Medicinal Chemistry Neuroscience

Research Centre, Merck Sharp and Dohme Research

Laboratories, Harlow Essex, CM20 2QR, UK

SOURCE: Journal of Medicinal Chemistry (1998), 41(23),

4623-4635

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

Previously reported studies from these labs. described the design of a novel series of high-affinity NK1 antagonists based on the 4,4-disubstituted piperidine ring system. Further structure-activity studies have now established that for high NK1 affinity the benzyl ether side chain must be 3,5-disubstituted and highly lipophilic, the optimal side chain being the 3,5bis(trifluoromethyl)benzyl ether, 12 (hNK1 IC50 = 0.95 nM). Addnl. studies have shown that this class of NK1 antagonist tolerates a wider range of substituents on the piperidine nitrogen, including acyl (hNK1 IC50 = 5.3 nM)

and sulfonyl (hNK1 IC50 = 5.7 nM) derivs. Following preliminary pharmacokinetic anal., two compds. were selected for in vivo study in the resiniferotoxin-induced vascular leakage model, both showing excellent profiles (ID50 = 0.22 and 0.28 mg/kg, resp.).

ΙT 158144-82-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

AB

(structure-activity relationships and in vivo activity of 4,4-disubstituted piperidine high-affinity antagonists)

158144-82-2 CAPLUS RN

1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-phenyl-, 1,1-dimethylethyl CN ester (CA INDEX NAME)

L3 ANSWER 73 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1998:515940 CAPLUS Full-text

DOCUMENT NUMBER: 129:260777

ORIGINAL REFERENCE NO.: 129:53153a,53156a

TITLE: Serine derived NK1 antagonists 2: a pharmacophore

model for arylsulfonamide binding

AUTHOR(S): Elliott, J. M.; Broughton, H.; Cascieri, M. A.;

Chicchi, G.; Huscroft, I. T.; Kurtz, M.; MacLeod, A.

M.; Sadowski, S.; Stevenson, G. I.

CORPORATE SOURCE: Neuroscience Research Center, Merck, Sharp and Dohme

Research Laboratories, Essex, CM20 2QR, UK

SOURCE: Bioorganic & Medicinal Chemistry Letters (1998),

8(14), 1851-1856

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

## \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Modifications to the spirocyclic aryl sulfonamide portion of serine derived NK1 antagonists allow a partial pharmacophore model to be developed. The compds. were prepared by coupling of a suitable amine (syntheses were provided for amines not com. available) to the enantiomerically pure acid I, followed by Boc deprotection and N-benzylation. In the binding study of hNK1 receptors, it was found that if either the spirocyclic aromatic ring or the sulfonamide of the previously synthesized, lead compound II are removed, than the resulting compds. III (IC50 = 2500  $\pm$  1054 nM) and IV (IC50 = 602  $\pm$  233 nM) have much lower binding affinities for the NK1 receptor than that of II (1.0  $\pm$  0.6 nM).

IT 199104-67-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of serine ary lsulfonamides as NK1 antagonists to establish a pharmacophore model of the ary lsulfonamide binding of NK1 receptors)  $\,$ 

RN 199104-67-1 CAPLUS

CN Methanesulfonamide, N-[[1-[(2S)-3-[(3,4-dichlorophenyl)methoxy]-1-oxo-2-[(phenylmethyl)amino]propyl]-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

IT 158144-82-2P

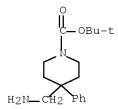
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation of serine ary lsulfonamides as NK1 antagonists to establish a pharmacophore model of the ary lsulfonamide binding of NK1 receptors)  $\,$ 

RN 158144-82-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 74 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1998:479024 CAPLUS Full-text

DOCUMENT NUMBER: 129:136173

ORIGINAL REFERENCE NO.: 129:27841a,27844a

TITLE: Preparation of heterocyclic compounds as tachykinin

receptor ligands

INVENTOR(S): Emonds-Alt, Xavier; Grossriether, Isabelle; Gueule,

Patrick; Proietto, Vincenzo; Van Broeck, Didier;

Taillades, Joelle

PATENT ASSIGNEE(S): Sanofi, Fr.

SOURCE: U.S., 65 pp., Cont.-in-part of U.S. 5,641,777.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PA:	TENT	NO.			KINI		DATE		AF	PL	ICAT	ION I	NO.		D	ATE	
US	5780	466					 1998	0714	US	1	 996-	7037.	 29		1	9960	827
FR	2729	952			A1		1996	0802	FF	1	995-	1016			1	9950	130
FR	2729	952			В1		1997	0418									
FR	2729	953			A1		1996	0802	FF	1	995-	8046			1	9950	704
FR	2729	953			В1		1997	0801									
FR	2729	954			A1		1996	0802	FF	1	995-	1300	5		1	9951	103
FR	2729	954			В1		1997	0801									
IN	1867	66			A1		2001	1103	IN	1 1	996-	DE16	9		1	9960	125
ZA	9600	694			Α		1996	0826	ZP	1	996-	694			1	9960	130
US	5641	777			A		1997	0624	US	1	996-	5939.	38		1	9960	130
JΡ	2001	1311	71		A		2001	0515	JF	2	000-	3426	06		1	9960	130
JP	2001	1722	79		Α		2001	0626	JF	2	000-	3425	71		1	9960	130
ΕP	1156	049			A1		2001	1121	EF	2	001-	1199	49		1	9960	130
ΕP	1156	049			В1		2005	0601									
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, G	R,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV												
ΕP	1340	754			A1		2003	0903	EF	2	003-	1277	1		1	9960	130
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		IE,	SI,	LT,	LV												
IL	1271	14	,	·	А		2004	0927		ΙL	1996	-1271	14			19960	130
EP	1688	416										-5775				19960	130
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	R, IT	, LI,	LU,	NL,	SE	c, MC,	PT,
		IE,	SI,	LT,													
CN	1821	241			Α		2006	0823	(	CN	2006	-1000	8868			19960	130
EP	1923											-1504				19960	
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		•	LT,	LV,													
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	5869				А		1999		1	US	1997	-8207	16			19970	
	6011				А		2000			US	1998	-4454				19980	
	1041				A1		2005			HK	2002	-1036	21			19980	
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	6242				B1 A		2001		]	US	1998	-1753	31			19981	
	9930				A B2		1999			AU	1999	-3013	3			19990	1519
	7317						2001			TD	0001	2204	0.6			00011	105
			88		B2		2002			JP	2001	-3394	.06			20011	.105
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PRIORIII	I APP.	LIN.	INFO	• •								-1016 -8046			A.	19950	1704
										LD LV	1995	-6046 -1300	5		A A	19951	103
										IIC LIX	1996	_5939	38			19960	
									-	FR	1996	-9439	50			19960	
										AII	1996	-4666	9		Δ3	19960	1130
										CN	2003	-1011	9883			19960	
									-	EP	1996	-9023	05			19960	
												-1199			А3	19960	130
										ΕP	2003	-1277	1		А3	19960	130
									-	EР	2006	-5775	ı		А3	19960	130
										ΙL	1996	-1169	57		А3	19960	130
										JΡ	1996	-5233	8 0		А3	19960	130
										JΡ	2000	-3425	71		А3	19960 19960 19960 19970	130
									1	US	1996	-7037	29		А3	19960	827
									1	US	1997	-8207	16		А3	19970	318
										ΗK	1998	-1009	95		Α	19980	210

OTHER SOURCE(S): MARPAT 129:136173

AB R(CH2)mCR1R2CH2NR3R4 [R = 4-substituted piperidino, 1-alkyl- or 1-benzyl-4-substituted piperidinium-1-yl, aryl(methyl)pyridinium-1-yl, etc.; R1 = (un)substituted Ph, -indolyl, -pyridyl, etc.; R2R3 = O2C, CH2O2C, OCO, OCH2CH2, NHCO, etc.; R4 = (hetero)arylmethyl, CHPh2, CPh3, etc.; m = 2 or 3]

were prepared Thus, HOCH2CR1(CH2CH2OTHP)CH2NH2 (R1 = C6H3C12-3,4, THP = 2-tetrahydropyranyl) (preparation given) was cyclocondensed with COC12 and the product converted in 4 steps to title compound I. Data for biol. activity of the title compds. were given.

IT 181641-71-4P 181641-83-8P 189877-07-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of heterocyclic compds. as tachykinin receptor ligands)

RN 181641-71-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[(1-pyrrolidinylamino)carbonyl]-, phenylmethyl ester, monobenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 181641-70-3 CMF C24 H29 N3 O3

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CM 2

CRN 98-11-3 CMF C6 H6 O3 S

RN 181641-83-8 CAPLUS

CN 1,4-Piperidinedicarboxylic acid, 4-phenyl-, 1-(phenylmethyl) ester, 4-hydrazide (CA INDEX NAME)

RN 189877-07-4 CAPLUS

CN 1,4-Piperidinedicarboxylic acid, 4-phenyl-, 1-(phenylmethyl) ester, 4-(2,2-dimethylhydrazide), mono(4-methylbenzenesulfonate) (9CI) (CA INDEX

NAME)

CM 1

CRN 189877-06-3 CMF C22 H27 N3 O3

CM 2

CRN 104-15-4 CMF C7 H8 O3 S

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 75 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1997:798591 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 128:13439

ORIGINAL REFERENCE NO.: 128:2625a,2628a

TITLE: Preparation of serine derivatives useful as tachykinin

antagonists

INVENTOR(S): Elliott, Jason Matthew; Macleod, Angus Murray;

Stevenson, Graeme Irvine

PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK SOURCE: Brit. UK Pat. Appl., 80 pp.

CODEN: BAXXDU

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				_	
GB 2309458	A	19970730	GB 1997-1206		19970121
US 5885999	A	19990323	US 1997-786522		19970121
PRIORITY APPLN. INFO.:			GB 1996-1724	Α	19960129
OTHER SOURCE(S):	CASREA	CT 128:13439;	; MARPAT 128:13439		

GΙ

AΒ Title compds. I [m = 0-2; n = 0, 1; with the proviso that <math>m + n = 1 or 2; R1 =Ph, naphthyl, Ph2CH, PhCH2, where the naphthyl or any Ph moiety may be substituted; R2 = H, Ph, heteroaryl such as indazolyl, thienyl, furanyl, pyridyl, thiazolyl, tetrazolyl, quinolinyl, naphthyl, Ph2CH, PhCH2, wherein each heteroaryl, the naphthyl and any Ph moiety may be substituted; R3, R4 = independently H, C1-6 alkyl; R3R4 = C1-3 alkylene chain; Q = CR5R6, NR5; X = Y= H; XY = O; Z = bond, O, S, S(O), SO2, NR7 or CR7R8; R7, R8 = independently ${\rm H}$ ,  ${\rm C1-6}$  alkyl] or pharmaceutically acceptable salts thereof are of particular use in the treatment or prevention of pain, inflammation, migraine, emesis and postherpetic neuralgia. Thus, coupling of (S)-2-tert-butoxycarbonylamino-3-(3,4- dichlorobenzyloxy) propionic acid with 4-(2-keto-1benzimidazolinyl)piperidine, followed by acidic deprotection and reductive benzylation with benzaldehyde and sodium borohydride gave serine derivative II as its HCl salt. The compds. prepared here are active with IC50 at the NK1 receptor of less than 1  $\mu M$ .

ΙT 199103-93-0P 199103-94-1P 199104-09-1P 199104-11-5P 199104-34-2P 199104-35-3P 199104-67-1P 199104-69-3P

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of serine derivs. useful as tachykinin antagonists)

199103-93-0 CAPLUS RN

Acetamide, N-[[1-[(2S)-2-[[(3,4-dichlorophenyl)methyl]amino]-1-oxo-3-CN (phenylmethoxy)propyl]-4-phenyl-4-piperidinyl]methyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

HC1

RN 199103-94-1 CAPLUS

CN Methanesulfonamide, N-[[1-[(2S)-2-[[(3,4-dichlorophenyl)methyl]amino]-1oxo-3-(phenylmethoxy)propyl]-4-phenyl-4-piperidinyl]methyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

RN 199104-09-1 CAPLUS

CN Methanesulfonamide, N-[[1-[(2S)-3-[(3,4-dichlorophenyl)methoxy]-1-oxo-2-[(phenylmethyl)amino]propyl]-4-phenyl-4-piperidinyl]methyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 199104-11-5 CAPLUS

CN Acetamide, N-[[1-[(2S)-3-[(3,4-dichlorophenyl)methoxy]-1-oxo-2-[(phenylmethyl)amino]propyl]-4-phenyl-4-piperidinyl]methyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

RN 199104-34-2 CAPLUS

CN Acetamide, N-[[1-[(2S)-2-[[(3,4-dichlorophenyl)methyl]amino]-1-oxo-3-(phenylmethoxy)propyl]-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 199104-35-3 CAPLUS

CN Methanesulfonamide, N-[[1-[(2S)-2-[[(3,4-dichlorophenyl)methyl]amino]-1-oxo-3-(phenylmethoxy)propyl]-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 199104-67-1 CAPLUS

CN Methanesulfonamide, N-[[1-[(2S)-3-[(3,4-dichlorophenyl)methoxy]-1-oxo-2-[(phenylmethyl)amino]propyl]-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 199104-69-3 CAPLUS

CN Acetamide, N-[[1-[(2S)-3-[(3,4-dichlorophenyl)methoxy]-1-oxo-2-[(phenylmethyl)amino]propyl]-4-phenyl-4-piperidinyl]methyl]- (CA INDEX NAME) Absolute stereochemistry.

IT 158144-82-2P 199104-96-6P 199104-98-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of serine derivs. useful as tachykinin antagonists)

RN 158144-82-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 199104-96-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(methylsulfonyl)amino]methyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 199104-98-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(acetylamino)methyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

AcNH-
$$CH_2$$
Ph

ANSWER 76 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:610363 CAPLUS Full-text

DOCUMENT NUMBER: 127:205472

ORIGINAL REFERENCE NO.: 127:39943a,39946a

TITLE: Preparation of pyrrolidinealkanoates and analogs as

bradykinin antagonists

INVENTOR(S): Wagner, Adalert; Breipohl, Gerhard; Heitsch, Holger;

Gerhards, Hermann; Noelken, Gerhard; Wirth, Klaus;

Schoelkens, Bernward

Hoechst A.-G., Germany PATENT ASSIGNEE(S): SOURCE:

Ger. Offen., 28 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_ DE 19603767 A1 19970807 DE 1996-19603767 19960202 PRIORITY APPLN. INFO.: DE 1996-19603767 19960202

OTHER SOURCE(S): MARPAT 127:205472

GΙ

Title compds. [e.g., I; R = CHR2COR1; R1 = OH, alkoxy, alkylaryloxy, AΒ (di)(alkyl)amino, etc.; R2 = (cyclo)alk(en)yl, aryl, etc.; R3 = H, (cyclo)alkyl, aralkyl, etc.; R6 = e.g., CH2C6H4(CH2NR4R5)-4; R4 = H, alkyl, alkoxycarbonyl, amidino, etc.; R5 = H, 1-acyl-4-phenyl-4- piperidinylcarbonyl, etc.] were prepared Thus, Et 2- pyrrolidinylideneacetate was alkylated by 2bromomethylnaphthalene and the product N-alkylated by 4-(Me3CO2CNH)C6H4CH2OSO2Me (preparation given) to give, after reduction, I [R = CHR2COR1, R1 = OEt, R2 = 2-naphthylmethyl, R6 = 4-(Me3CO2CNH)C6H4CH2]. Data for biol. activity of I were given.

194609-89-7P 194609-90-0P 194609-91-1P ΙT 194609-92-2P 194609-94-4P 194609-96-6P 194609-98-8P 194610-00-9P 194610-02-1P 194610-03-2P 194610-04-3P

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrrolidinealkanoates and analogs as bradykinin antagonists)

194609-89-7 CAPLUS RN

CN 2-Naphthalenepropanoic acid,  $\alpha$ -[1-[[4-[[[2-[[[1-[[(8aminooctyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-1-oxo-3(2-thienyl)propyl]amino]methyl]phenyl]methyl]-2-pyrrolidinylidene]-, ethyl ester, (S)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 194609-88-6 CMF C55 H68 N6 O5 S

Absolute stereochemistry. Double bond geometry unknown.

PAGE 1-B

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 194609-90-0 CAPLUS 
CN 2-Pyrrolidineacetic acid, 1-[[4-[[[2-[[[1-[[(8-aminooctyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-1-oxo-3-(2-thienyl)propyl]amino]methyl]phenyl]methyl]- $\alpha$ -(2-naphthalenylmethyl)-, ethyl ester, [1(S)]-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 194609-91-1 CAPLUS

CN 2-Naphthalenepropanoic acid,  $\alpha-[1-[[4-[[[1-[[8-[[(1,1-dimethylethoxy)carbonyl]amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]methyl]phenyl]methyl]-2-pyrrolidinylidene]-, ethyl ester (CA INDEX NAME)$ 

PAGE 2-A

RN 194609-92-2 CAPLUS CN 2-Pyrrolidineacetic acid,  $1-[[4-[[[1-[[[8-[[(1,1-dimethylethoxy)carbonyl]amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]methyl]phenyl]methyl]-<math>\alpha$ -(2-naphthalenylmethyl)-, ethyl ester (CA INDEX NAME)

PAGE 1-A

RN 194609-94-4 CAPLUS

CN 2-Naphthalenepropanoic acid,  $\alpha$ -[1-[[4-[[[1-[[(8-aminooctyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]methyl]phenyl]methyl]-2-pyrrolidinylidene]-, ethyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 194609-93-3 CMF C48 H61 N5 O4

PAGE 1-A

PAGE 2-A

CRN 76-05-1 CMF C2 H F3 O2

RN 194609-96-6 CAPLUS

CN 2-Pyrrolidineacetic acid, 1-[[4-[[[1-[[(8-aminooctyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]methyl]phenyl]methyl]- $\alpha$ -(2-naphthalenylmethyl)-, ethyl ester, 2,2,2-trifluoroacetate (1:2) (CA INDEX NAME)

CM 1

CRN 194609-95-5 CMF C48 H63 N5 O4

PAGE 1-A

$$CH_2$$
  $CH_2$ 

CRN 76-05-1 CMF C2 H F3 O2

RN 194609-98-8 CAPLUS

CN 2-Naphthalenepropanoic acid,  $\alpha-[1-[[4-[[[1-[[8-[(aminoiminomethyl)amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]methyl]phenyl]methyl]-2-pyrrolidinylidene]-, ethyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)$ 

CM 1

CRN 194609-97-7 CMF C49 H63 N7 O4

CRN 76-05-1 CMF C2 H F3 O2

RN 194610-00-9 CAPLUS

CN 2-Pyrrolidineacetic acid, 1-[[4-[[[1-[[[8-[(aminoiminomethyl)amino]octyl] amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]methyl]phenyl]methyl ]- $\alpha$ -(2-naphthalenylmethyl)-, ethyl ester, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 194609-99-9 CMF C49 H65 N7 O4

CRN 76-05-1 CMF C2 H F3 O2

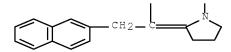
RN 194610-02-1 CAPLUS

CN 2-Naphthalenepropanoic acid,  $\alpha-[1-[[4-[[[1-[[(6-aminohexyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]methyl]phenyl]methyl]-2-pyrrolidinylidene]-, ethyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)$ 

CM 1

CRN 194610-01-0 CMF C46 H57 N5 O4

PAGE 1-A



CRN 76-05-1 CMF C2 H F3 O2

RN 194610-03-2 CAPLUS

CN 2-Pyrrolidineacetic acid, 1-[[4-[[[1-[[(6-aminohexyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]methyl]phenyl]methyl]- $\alpha$ -(2-naphthalenylmethyl)-, ethyl ester (CA INDEX NAME)

RN 194610-04-3 CAPLUS

CN 2-Pyrrolidineacetic acid, 1-[[4-[[[1-[[[6-[(aminoiminomethyl)amino]hexyl] amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]methyl]phenyl]methyl ]- $\alpha$ -(2-naphthalenylmethyl)-, ethyl ester (CA INDEX NAME)

IT 192436-73-0P 192436-74-1P 194610-12-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of pyrrolidinealkanoates and analogs as bradykinin antagonists)

RN 192436-73-0 CAPLUS

CN 2-Thiophenepropanoic acid,  $\alpha-[[[1-[[8-[[(1,1-dimethylethoxy)carbonyl]amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-, methyl ester, (<math>\alpha$ S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 192436-74-1 CAPLUS

CN 2-Thiophenepropanoic acid,  $\alpha-[[[1-[[[8-[[(1,1-dimethylethoxy)carbonyl]amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-, (<math>\alpha$ S)- (CA INDEX NAME)

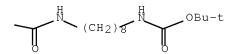
Absolute stereochemistry.

RN 194610-12-3 CAPLUS

CN 2-Naphthalenepropanoic acid,  $\alpha-[1-[[4-[[(2S)-2-[[[1-[[[8-[[(1,1-dimethylethoxy)carbonyl]amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-1-oxo-3-(2-thienyl)propyl]amino]methyl]phenyl] methyl]-2-pyrrolidinylidene]-, ethyl ester (CA INDEX NAME)$ 

PAGE 1-A

Absolute stereochemistry. Double bond geometry unknown.



L3 ANSWER 77 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1997:491537 CAPLUS Full-text

DOCUMENT NUMBER: 127:109193

ORIGINAL REFERENCE NO.: 127:21067a,21070a

TITLE: Preparation of tri- and tetrapeptides as bradykinin

antagonists

INVENTOR(S): Wagner, Adalbert; Breipohl, Gerhard; Heitsch, Holger;

Gerhards, Hermann; Noelken, Gerhard; Wirth, Klaus;

Schoelkens, Bernward

PATENT ASSIGNEE(S): Hoechst A.-G., Germany

SOURCE: Ger. Offen., 16 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
DE 19546938 IN 1996MA01690 PRIORITY APPLN. INFO.:	A1 A	19970619 20050304	DE 1995-19546938 IN 1996-MA1690 DE 1995-19546938	.– А	19951215 19960925 19951215
OTHER SOURCE(S): GI	CASREA	ACT 127:1091	93; MARPAT 127:109193		

AB Title compds. [I, R = H, alkyl, amino, (un)substituted amidino; R1 = (un)substituted (un)saturated C1-10 alkyl, substituted OH, NH2, SH; m, n = 1-10; A1, A2 = bond, (un)substituted amino acid; A3, A4 = bond, heterocyclic ring], bradykinin antagonists, were prepared and tested. Thus, I [R = amidino; R1 = Ph; A1 = thioGly; A2 = D-Tic; A3, A4 = bond; m, n = 8 (II)] was prepared from 4-phenylpiperidine-4-carboxylic acid, BocNH(CH2)8NH2, thioGly Me ester, and D-Tic Me ester in several steps. II.2HCl had IC50 of 1.0μM in quinea pig ileum in vitro.

IT 192436-92-3P 192436-95-6P 192436-98-9P

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192437-01-7P 192437-04-0P 192437-07-3P 192437-10-8P 192437-13-1P 192437-16-4P 192437-19-7P 192437-22-2P 192437-27-7P 192437-25-7P 192437-31-3P 192437-33-5P 192437-35-7P 192437-37-9P 192437-39-1P 192437-41-5P 192437-46-0P 192437-49-3P 192437-52-8P 192437-56-2P 192437-58-4P
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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tri and tetrapeptides as bradykinin antagonists)

RN 192436-92-3 CAPLUS

1H-Indole-2-carboxamide, N-[[1-[[(8-aminooctyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-N-(4-aminobutyl)octahydro-, (2S,3aS,7aS)-, bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CN

CRN 192436-91-2 CMF C54 H77 N9 O7 S

Absolute stereochemistry.

PAGE 2-A

CRN 76-05-1 CMF C2 H F3 O2

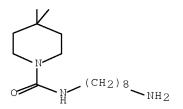
RN 192436-95-6 CAPLUS

CN 1H-Indole-2-carboxamide, N-[[1-[[(8-aminooctyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-N-(2-aminoethyl)octahydro-, (2S,3aS,7aS)-, bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 192436-94-5 CMF C52 H73 N9 O7 S

Absolute stereochemistry.



CRN 76-05-1 CMF C2 H F3 O2

RN 192436-98-9 CAPLUS

CN 1H-Indole-2-carboxamide, N-[[1-[[(8-aminooctyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanylglycyl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-N-(4-aminobutyl)octahydro-, (2S,3aS,7aS)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 192436-97-8 CMF C53 H75 N9 O6 S

Absolute stereochemistry.

PAGE 1-A

CRN 76-05-1 CMF C2 H F3 O2

RN 192437-01-7 CAPLUS

CN 1H-Indole-2-carboxamide, N-[[1-[[(8-aminooctyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanylglycyl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-N-(2-aminoethyl)octahydro-, (2S,3aS,7aS)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 192437-00-6 CMF C51 H71 N9 O6 S

Absolute stereochemistry.

CRN 76-05-1 CMF C2 H F3 O2

RN 192437-04-0 CAPLUS

CN 1H-Indole-2-carboxamide, N-[[1-[[(6-aminohexyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-N-(8-aminooctyl)octahydro-, (2S,3aS,7aS)-, bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 192437-03-9 CMF C56 H81 N9 O7 S

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

CN 3-Isoquinolinecarboxamide, N-[[1-[[(8-aminooctyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanyl-L-seryl-N-(8-aminooctyl)-1,2,3,4-tetrahydro-, (3R)-, bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 192437-06-2 CMF C49 H72 N8 O6 S

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 192437-10-8 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[(8-aminooctyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]glycylglycyl-N-(6-aminohexyl)-1,2,3,4-tetrahydro-, (3R)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 192437-09-5 CMF C41 H62 N8 O5 Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 192437-13-1 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[(8-aminooctyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]glycylglycyl-N-(8-aminooctyl)-1,2,3,4-tetrahydro-, (3R)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 192437-12-0 CMF C43 H66 N8 O5

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 192437-16-4 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[(8-aminooctyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanylglycyl-N-(6-aminohexyl)-1,2,3,4-tetrahydro-, (3R)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 192437-15-3 CMF C46 H66 N8 O5 S

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN

192437-19-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[(8-aminooctyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanylglycyl-N-(8-aminooctyl)-1,2,3,4-tetrahydro-, (3R)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CRN 192437-18-6 CMF C48 H70 N8 O5 S

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 192437-22-2 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[(6-aminohexyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanyl-L-seryl-N-(6-aminohexyl)-1,2,3,4-tetrahydro-, (3R)-, bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 192437-21-1 CMF C45 H64 N8 O6 S

Absolute stereochemistry.

CRN 76-05-1 CMF C2 H F3 O2

RN 192437-27-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[[8-[(aminoiminomethyl)amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanylglycyl-N-(6-aminohexyl)-1,2,3,4-tetrahydro-, monohydrochloride, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 2-A

● HCl

RN 192437-29-9 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[(8-aminooctyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanylglycyl-N-[6-[(aminoiminomethyl)amino]hexyl]-1,2,3,4-tetrahydro-, monohydrochloride, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 192437-31-3 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[[6-[(aminoiminomethyl)amino]hexyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanyl-L-seryl-

N-(6-aminohexy1)-1,2,3,4-tetrahydro-, monohydrochloride, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

HC1

RN 192437-33-5 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[(6-aminohexyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanyl-L-seryl-N-[6-[(aminoiminomethyl)amino]hexyl]-1,2,3,4-tetrahydro-, monohydrochloride, (3R)- (9CI) (CA INDEX NAME)

RN 192437-35-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[[8-[(aminoiminomethyl)amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanylglycyl-N-(8-aminooctyl)-1,2,3,4-tetrahydro-, monohydrochloride, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 2-A

● HCl

RN 192437-37-9 CAPLUS

CN

3-Isoquinolinecarboxamide, N-[[1-[[(8-aminooctyl)amino]carbonyl]-4-phenyl-

4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanylglycyl-N-[8- [(aminoiminomethyl)amino]octyl]-1,2,3,4-tetrahydro-, monohydrochloride, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 192437-39-1 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[[8-[(aminoiminomethyl)amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanylglycyl-N-[6-[(aminoiminomethyl)amino]hexyl]-1,2,3,4-tetrahydro-, dihydrochloride, (3R)- (9CI) (CA INDEX NAME)

●2 HC1

RN 192437-41-5 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[[8-[(aminoiminomethyl)amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanylglycyl-N-[8-[(aminoiminomethyl)amino]octyl]-1,2,3,4-tetrahydro-, dihydrochloride, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 2-A

●2 HCl

RN 192437-46-0 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[(8-aminooctyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanyl-L-seryl-1,2,3,4-tetrahydro-N-octyl-, (3R)-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 192437-45-9 CMF C49 H71 N7 O6 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 192437-49-3 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[(8-aminooctyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanyl-L-seryl-1,2,3,4-tetrahydro-N-(phenylmethyl)-, (3R)-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 192437-48-2 CMF C48 H61 N7 O6 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 192437-52-8 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[(8-aminooctyl)amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanylglycyl-1,2,3,4-tetrahydro-N-octyl-, (3R)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 192437-51-7 CMF C48 H69 N7 O5 S

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 192437-54-0 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[[8-[(aminoiminomethyl)amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanyl-L-seryl-1,2,3,4-tetrahydro-N-octyl-, monohydrochloride, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 2-A

HC1

RN 192437-56-2 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[8-[(aminoiminomethyl)amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanylglycyl-1,2,3,4-tetrahydro-N-octyl-, monohydrochloride, (3R)- (9CI) (CA INDEX NAME)

PAGE 2-A

● HCl

RN 192437-58-4 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[[8-[(aminoiminomethyl)amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanylglycyl-1,2,3,4-tetrahydro-N-(phenylmethyl)-, monohydrochloride, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● HCl

**→**NH2

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IT 192436-73-0P 192436-74-1P 192436-75-2P 192436-877-4P 192436-80-9P 192436-82-1P 192436-86-5P 192436-88-7P 192437-43-7P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of tri and tetrapeptides as bradykinin antagonists) RN 192436-73-0 CAPLUS 2-Thiophenepropanoic acid, \alpha-[[[1-[[[8-[[(1,1-dimethylethoxy)carbonyl]amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-, methyl ester, (\alphaS)- (CA INDEX NAME)
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Absolute stereochemistry.

RN 192436-74-1 CAPLUS

CN 2-Thiophenepropanoic acid,  $\alpha-[[[1-[[[8-[[(1,1-dimethylethoxy)carbonyl]amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]amino]-, (<math>\alpha$ S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 192436-75-2 CAPLUS

CN L-Serine, N-[[1-[[[8-[[(1,1-dimethylethoxy)carbonyl]amino]octyl]amino]carb onyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanyl-O-(1,1-dimethylethyl)-, methyl ester (9CI) (CA INDEX NAME)

RN 192436-77-4 CAPLUS

CN L-Serine, N-[[1-[[[8-[[(1,1-dimethylethoxy)carbonyl]amino]octyl]amino]carb onyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanyl-O-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 192436-80-9 CAPLUS

CN 3-Isoquinolinecarboxylic acid, N-[[1-[[[8-[[(1,1-dimethylethoxy)carbonyl]amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanyl-O-(1,1-dimethylethyl)-L-seryl-1,2,3,4-tetrahydro-, methyl ester, (3R)- (9CI) (CA INDEX NAME)

**∽**OBu-t

RN 192436-82-1 CAPLUS

CN 3-Isoquinolinecarboxylic acid, N-[[1-[[[8-[[(1,1-dimethylethoxy)carbonyl]amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanyl-0-(1,1-dimethylethyl)-L-seryl-1,2,3,4-tetrahydro-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

**→**OBu-t

RN 192436-86-5 CAPLUS

CN 1H-Indole-2-carboxylic acid, N-[[1-[[8-[[(1,1-dimethylethoxy)carbonyl]amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanyl-0-(1,1-dimethylethyl)-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyloctahydro-, methyl ester, (2S,3aS,7aS)- (9CI) (CA INDEX NAME)

RN 192436-88-7 CAPLUS
CN 1H-Indole-2-carboxylic acid, N-[[1-[[[8-[[(1,1-dimethylethoxy)carbonyl]amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanyl-O-(1,1-dimethylethyl)-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyloctahydro-, (2S,3aS,7aS)-(9CI) (CA INDEX NAME)

RN 192437-43-7 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[[1-[[[8-[[(1,1-dimethylethoxy)carbonyl]amino]octyl]amino]carbonyl]-4-phenyl-4-piperidinyl]carbonyl]-3-(2-thienyl)-L-alanyl-O-(1,1-dimethylethyl)-L-seryl-1,2,3,4-tetrahydro-N-octyl-, (3R)-(9CI) (CA INDEX NAME)

L3 ANSWER 78 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1997:453899 CAPLUS Full-text

DOCUMENT NUMBER: 127:81436

ORIGINAL REFERENCE NO.: 127:15617a,15620a

TITLE: Preparation of 3-benzoyl-5-

(piperidinoalkyl)oxazolidines and analogs as

tachykinin receptor antagonists

INVENTOR(S): Nishi, Takahide; Ishibashi, Koki; Nakajima,

Katsuyoshi; Fukazawa, Tetsuya; Kurata, Hitoshi;

Yamaguchi, Takeshi; Ito, Kazuhiro

PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan SOURCE: Eur. Pat. Appl., 565 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.		KIND	DATE	APPLICATION NO.	DATE 		
EP 776893 EP 776893		A1 B1	19970604 20020227	EP 1996-308711	19961202		
R: AT, PT,		DE, Dr	t, ES, FI,	FR, GB, GR, IE, IT, LI,	LU, MC, NL,		
HU 9603298 HU 9603298 HU 224225		A2 A3 B1	19980928 19991028 20050628	HU 1996-3298	19961129		
RU 2135494 CN 1157286		C1 A	19990827 19970820	CN 1996-123888	19961129 19961201		
IL 119729 CA 2191815 CA 2191815		A A1 C	20010724 19970602 20050510	IL 1996-119729 CA 1996-2191815	19961201 19961202		
NO 9605125 NO 308300		A B1	19970602 20000828	NO 1996-5125	19961202		
ZA 9610116 AU 9674065 AU 719158		A A B2	19970602 19970605 20000504	ZA 1996-10116 AU 1996-74065	19961202 19961202		
JP 09235275	ı	A	19970909	JP 1996-321780	19961202		

JP 3088672	В2	20000918				
JP 10152478	A	19980609	JP	1997-347908		19961202
US 6159967	A	20001212	US	1996-758421		19961202
CZ 288498	В6	20010613	CZ	1996-3521		19961202
AT 213738	T	20020315	AT	1996-308711		19961202
PT 776893	T	20020628	PT	1996-308711		19961202
ES 2170211	Т3	20020801	ES	1996-308711		19961202
JP 10182649	A	19980707	JP	1997-305110		19971107
JP 3017147	В2	20000306				
JP 10182650	A	19980707	JP	1997-350658		19971107
JP 2000103791	A	20000411	JP	1999-318854		19971107
нк 1011366	A1	20020802	HK	1998-112514		19981130
US 6448247	В1	20020910	US	2000-533061		20000322
PRIORITY APPLN. INFO.:			JP	1995-313828	A	19951201
			JP	1995-336369	A	19951225
			JP	1996-296869	A	19961108
			JP	1996-321780	А3	19961202
			US	1996-758421	A3	19961202
			JP	1997-305110	A3	19971107
OTHER COMPCE/C).	MADDAT	127.01/26				

OTHER SOURCE(S): MARPAT 127:81436

GΙ

AB Title compds. [I; R = Z4Z5R1; R1,R2 = (un)substituted (hetero)aryl; Z = alk(en)ylene; Z1 = NR3 or CR4R5; R3 = (un)substituted (hetero)aryl; R4 = H or (un)substituted (hetero)aryl; R5 = alkyl, alkoxy, alkanoyl, carbamoyl, etc.; Z2 = O or S; Z3 = alkylene, cycloalkylidene, etc.; Z4 = CH2, CO, SO2; Z5 = bond or alk(en)ylene] were prepared Thus, 3,4-ClC6H3Br was condensed with CH2:CICH2CH2OSiMe3CMe3 and the product stereoselectively osmylated to give, in 2 addnl. steps, (R)-3,4-ClC6H3C(OH)(CH2NH2)CH2CH2OSiMe2CMe3. The latter was cyclized and the product N-benzoylated to give, in 2 addnl. steps, 3-benzoyl-5- oxazolidinylethyl mesylate II (R2 = C6H3Cl2-3,4)(III; R6 = OSO2Me) which was aminated by 4-phenylpiperidine-4-carboxamide to give III (R6 = 4-carbamoyl-4-phenylpiperidino). Data for biol. activity of I were given.

II 167262-69-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 3-benzoyl-5-(piperidinoalkyl)oxazolidines and analogs as tachykinin receptor antagonists)

RN 167262-69-3 CAPLUS

CN

1-Piperidinecarboxylic acid, 4-(aminocarbonyl)-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$H_{2N}$$
  $\stackrel{\circ}{=}$   $\stackrel{\circ}{=}$   $\stackrel{\circ}{=}$   $OBu-t$ 

L3 ANSWER 79 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1997:375289 CAPLUS Full-text

DOCUMENT NUMBER: 127:95200

ORIGINAL REFERENCE NO.: 127:18329a,18332a

TITLE: Substituted pyrrolidin-3-yl-alkyl-piperidines useful

as tachykinin antagonists

INVENTOR(S): Burkholder, Timothy P.; Kudlacz, Elizabeth M.;

Maynard, George D.

PATENT ASSIGNEE(S): Merrell Pharmaceuticals Inc., USA

SOURCE: U.S., 82 pp., Cont.-in-part of U.S. Ser. No. 225,371,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5635510	A	19970603	US 1994-332027	19941031
CN 1124961	A	19960619	CN 1994-192362	19940422
CN 1081635	В	20020327		
ZA 9403091	A	19950112	ZA 1994-3091	19940504
US 5648366	A	19970715	US 1995-477167	19950607
US 5861416	A	19990119	US 1997-795576	19970206
US 5824690	A	19981020	US 1997-798664	19970211
PRIORITY APPLN. INFO.:			US 1993-58606	B2 19930506
			US 1994-225371	B2 19940419
			US 1994-332027	A3 19941031

ΙI

OTHER SOURCE(S): MARPAT 127:95200

GI

$$Y^{1}$$
 $Y^{2}$ 
 $N \longrightarrow M$ 
 $Ar^{1}$ 
 $G^{1} \longrightarrow (CH_{2}) n \longrightarrow Ar^{2}$ 
 $T$ 

The invention relates to substituted pyrrolidinyl-3-yl-alkyl-piperidines I [G, AΒ G1 = CH2, CO; m = 2, 3; n = 0, 1; Ar1 = (un) substituted Ph, naphthyl, pyridyl, thienyl, or benzo[1,3]dioxan-5-yl; Ar2 = (un)substituted Ph or pyridyl; Y1 = (un) substituted CONH2; Y2 = (un) substituted Ph, naphthyl, pyridyl, thienyl, or CH2Ph; or Y1Y2 = atoms to complete certain Ph-substituted, 5-membered, diazaspiro ring fusions], their stereoisomers, N-oxides, and pharmaceutically acceptable salts, and processes for preparation of the same. I are useful for their pharmacol. activities, such as tachykinin antagonism, and especially substance P and neurokinin A antagonism. Such compds. are indicated for conditions associated with neurogenic inflammation and other diseases. For instance, 3-(3,4-dichlorophenyl)-3- (2-hydroxyethyl)pyrrolidine underwent a sequence of amidation with 3,4,5-trimethoxybenzoyl chloride (71%), conversion of the alc. to a methanesulfonate ester (92%), and reaction of the mesylate moiety with 4-phenylpiperidine-4-carboxamide-HCl (71%), to give title compound II. In an assay for modulation of NKA-induced respiratory effects in guinea pigs, II at 10 mg/kg reduced dyspnea to 60% of control.

IT 167262-69-3P 192069-70-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of pyrrolidinylalkylpiperidines as tachykinin antagonists)

RN 167262-69-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminocarbonyl)-4-phenyl-,
1,1-dimethylethyl ester (CA INDEX NAME)

RN 192069-70-8 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[2-(4-morpholinyl)ethyl]amino]carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

L3 ANSWER 80 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1997:374707 CAPLUS Full-text

DOCUMENT NUMBER: 126:343496

ORIGINAL REFERENCE NO.: 126:66801a,66804a

TITLE: Preparation of piperidine derivatives as neurokinin

antagonists

INVENTOR(S): Chabert, Nathalie; Emonds Alt, Xavier; Proietto,

Vincenzo; Ducoux, Jean Philippe; Gueule, Patrick; Van

Broeck, Didier

PATENT ASSIGNEE(S): Sanofi, Fr.

SOURCE: Fr. Demande, 96 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2738245	A1	19970307	FR 1995-10142	19950828
FR 2738245	B1	19971121		
GB 2304714	A	19970326	GB 1996-17893	19960828
GB 2304714	В	19990915		
BE 1009571	A3	19970506	BE 1996-723	19960828
JP 09124600	A	19970513	JP 1996-227222	19960828
US 5830906	A	19981103	US 1996-703952	19960828
CH 690437	A5	20000915	CH 1996-2120	19960828
US 5939411	A	19990817	US 1997-916952	19970825
US 5965580	A	19991012	US 1998-35823	19980306
PRIORITY APPLN. INFO.:			FR 1995-10142	A 19950828
			US 1996-703952	A3 19960828

OTHER SOURCE(S): MARPAT 126:343496

GΙ

Piperidines I [R1 = H, R2 = H, alkyl; R1R2 = (CH2)nQ; Q = CO, CH2; n = 1-3; m = 0, 1; Y= (un)substituted alkyl, OH, NH2, CONH2, thiazolyl; Ar1 == (un)substituted Ph, thienyl, benzothienyl, naphthyl, indolyl, imidazolyl, pyridyl, biphenyl; Ar2 = (un)substituted Ph, pyridyl, pyrimidyl, thienyl, imidazolyl; T = CH2, CO, (un)substituted CONH, CO2; A = CH2, CH2CH2; Z = (un)substituted aromatic, heteroarom.] were prepared for use in the treatment of neurokinin- and substance P-dependent diseases (no data). Thus, piperidine II was prepared from HOCH2CH2CH(C6H3Cl2-3,4)CH2NH2 by conversion to the N-methylbenzamide, benzenesulfonylation, amination with 4-(2-hydroxyethyl)-4-phenylpiperidine (III), and acetylation. III was obtained from 1-benzyl-4-hydroxy-4-phenylpiperidine by benzoylation, reaction with ethylene glycol, and debenzylation.

ΤT

IT 167263-14-1P 167263-16-3P 181641-83-8P 189877-07-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of aminoalkylpiperidines as neurokinin antagonists)

RN 167263-14-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(methylamino)carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 167263-16-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(dimethylamino)carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 181641-83-8 CAPLUS

CN 1,4-Piperidinedicarboxylic acid, 4-phenyl-, 1-(phenylmethyl) ester, 4-hydrazide (CA INDEX NAME)

RN 189877-07-4 CAPLUS

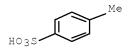
CN 1,4-Piperidinedicarboxylic acid, 4-phenyl-, 1-(phenylmethyl) ester, 4-(2,2-dimethylhydrazide), mono(4-methylbenzenesulfonate) (9CI) (CA INDEX NAME)

CM 1

CRN 189877-06-3 CMF C22 H27 N3 O3

CM 2

CRN 104-15-4 CMF C7 H8 O3 S



L3 ANSWER 81 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1997:302959 CAPLUS Full-text

DOCUMENT NUMBER: 126:277403

ORIGINAL REFERENCE NO.: 126:53775a,53778a

TITLE: Novel human NK3 receptor-selective antagonist

compounds containing them

INVENTOR(S): Bichon, Daniel; Edmonds-Alt, Xavier; Gueule, Patrick;

Proietto, Vincenzo; Van Broeck, Didier

PATENT ASSIGNEE(S): Sanofi, Fr.

SOURCE: PCT Int. Appl., 189 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	CENT :	NO.			KINI	O	DATE APPLICATION NO.							DATE			
WO	9710	211			A1	_	 1997	0320	1	WO 1	 996-1	FR14:	 16		1	99609	913
	W:	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
		DK,	EE,	ES,	FI,	GB,	GE,	HU,	IL,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,
		RO,	RU,	SD,	SE,	SG,	SI,	SK,	ТJ,	TM,	TR,	TT,	UA,	UG,	US,	UZ,	VN
	RW:	ΚE,	LS,	MW,	SD,	SZ,	UG,	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,
		ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG					
FR	2738	819			A1		1997	0321	:	FR 19	995-	1077	6		1	99509	914
FR	2738	819			В1		1997	1205									
CA	2232	007			A1		1997	0320	(	CA 19	996-	2232	007		19	99609	913
CA	2593	316			A1		1997	0320	(	CA 19	996-	2593	316		19	99609	913
AU	9669	925			Α		1997	0401		AU 19	996-	6992.	5		19	99609	913
BR	9610	081			Α		1999	0105		BR 19	996-	1008	1		19	99609	913
JΡ	1151	4983			T		1999	1221	ı	JP 1	997-	5117	18		19	99609	913
ΕP	1019	373			A1		2000	0719		EP 19	996-	9311:	26		19	99609	913
ΕP	1019	373			В1		2003	1112	2								
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		ΙE,	FΙ														
EP	12411	.68			A1		2002	0918	EF	2	002-	1082	4			1996	0913
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, G	BR,	ΙΤ,	LI,	LU,	NL,	SE	E, MC	, PT,
		ΙE,	FΙ														
AT	25410	4			T		2003	1115	ΑJ	1	996-	9311	26			1996	0913
US	60280	82			A		2000	0222	US	5 1	998-	4324	7			1998	0312
US	62916	72			В1		2001	0918	US	5 1	999-	4372	03			1999	1109
US	20020	0493	329		A1		2002	0425	US	5 2	001-	9548	62			2001	0918
US	67100	42			В2		2004	0323									
US	20040	2202	223		A1		2004	1104	US	5 2	004-	8057	33			2004	0322
JP	20081	.1518	82		A		2008	0522	JE	2	007-	2966	89			2007	1115
PRIORIT	Y APPI	N. :	INFO	.:					FF	1	995-	1077	6		A	1995	0914
									CF	1	996-	2232	007		АЗ	1996	0913
									EF	1	996-	9311	26		АЗ	1996	0913
									JE	1	997-	5117	18		АЗ	1996	0913
									WC	) 1	996-	FR14	16		W	1996	0913
									US	5 1	998-	4324	7		А3	1998	0312
									US	5 1	999-	4372	03		А3	1999	1109
									US	5 2	001-	9548	62		А3	2001	0918
OMITTED O	OTTDOD A	( )				70 000	100	0774	<b>11</b>								

OTHER SOURCE(S): MARPAT 126:277403

GΙ

AB Piperidinopropylpiperidine derivs. were prepared for use as human NK3 receptor antagonists (no data). Thus, 3,4-Cl2C6H3CH2CN was treated with CH2:CHCO2Me to give 3,4-Cl2C6H3CH(CN)(CH2CH2CO2Me)2 which was cyclized to the piperidonepropanoate and reduced to 3-(3,4-dichloropheny1)-3-(3-hydroxypropyl)piperidine (I). I was N-benzoylated, converted to the mesylate, and aminated to give the piperidinopropylpiperidine II.

IT 167262-69-3P 167263-14-1P 167263-16-3P 172734-14-4P 172734-16-6P 172734-44-0P 181641-83-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of piperidinopropylpiperidines as NK3 antagonists)

RN 167262-69-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminocarbonyl)-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 167263-14-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(methylamino)carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 167263-16-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(dimethylamino)carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 172734-14-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(butylamino)carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$n-BuNH-C$$
 $Ph$ 
 $C-OBu-t$ 

RN 172734-16-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(diethylamino)carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 172734-44-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(1-methylethyl)amino]carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 181641-83-8 CAPLUS

CN 1,4-Piperidinedicarboxylic acid, 4-phenyl-, 1-(phenylmethyl) ester, 4-hydrazide (CA INDEX NAME)

L3 ANSWER 82 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1997:94071 CAPLUS Full-text

DOCUMENT NUMBER: 126:104431

ORIGINAL REFERENCE NO.: 126:20165a,20168a

TITLE: Preparation of heterocyclic dipeptide derivatives

which promote release of growth hormone

INVENTOR(S): Carpino, Philip A.; Jardine DaSilva, Paul A.; Lefker,

Bruce A.; Ragan, John A.

PATENT ASSIGNEE(S): Pfizer Inc., USA

SOURCE: PCT Int. Appl., 173 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA.	TENT NO.			KINI	)	DATE		APPLICATION NO. DATE
WO	9638471			A1	- TTC	1996	1205	WO 1995-IB410 19950529
	W: CA,	•	•	•		EC	ED	CD CD TE TT III MC NI DT CE
	KW: AI,	BE,	CH,	DE,	DK	, ES,	rk,	GB, GR, IE, IT, LU, MC, NL, PT, SE
CA	2220055			A1		1996	1205	CA 1995-2220055 19950529
CA	2220055			С		2001	0424	
ΕP	828754			A1		1998	0318	EP 1995-918123 19950529
EP	828754			В1		2005	0202	
	R: AT,	BE,	CH,	DE,	DK	, ES,	FR,	GB, GR, IT, LI, LU, NL, SE, PT, IE
JΡ	10510511			${f T}$		1998	1013	JP 1995-511175 19950529
JΡ	3133073			В2		2001	0205	JP 1996-511175 19950529
ΑT	288444			Τ		2005	0215	AT 1995-918123 19950529
ES	2235171			Т3		2005	0701	ES 1995-918123 19950529

NO 9602162	A	19961202	NO	1996-2162		19960528
AU 9654554	A	19961212	AU	1996-54554		19960528
CN 1143647	A	19970226	CN	1996-107637		19960528
US 5936089	A	19990810	US	1997-973268		19971126
FI 9704368	A	19971128	FΙ	1997-4368		19971128
PRIORITY APPLN. INFO.:			WO	1995-IB333	Α	19950508
			WO	1995-IB410	W	19950529
OTHER COHROCK (C).	יי ע מ מ עועו	126.104421				

OTHER SOURCE(S): MARPAT 126:104431

GΙ

AΒ Title compds. I [Z = COCR1R2cLCOANR4R5; L = NR6, O, CH2; W = H; W and X =benzo fusion substituted with 0-3 R3a, TR3b, or R12; Y = H, C1-6 alkyl, C4-10 cycloalkyl, aryl-K, phenyl-(C1-6alkyl)-K, thienyl-(C1-6 alkyl)-K substituted with 0-3 R3a, R3b, or R12; K = bond, O, S(O)m, NR2a; X = OR2, R50MN(Aryl), R8R9NCO, R2bO2C, (un)substituted carbo- or heterobicyclic ring; R1 = (un) substituted C1-10 alkyl, aryl, etc.; R2c = H, C1-6 alkyl, C3-7 cycloalkyl; CR1R3c = (un)substituted C3-8 ring; R2 = H, C1-6 alkyl, C3-7 cycloalkyl; R2a = H, C1-6 alkyl; R2b = H, C1-8 alkyl, C1-8 halogenated alkyl, C3-8 cycloalkyl, alkylaryl, aryl; R3a, R12 = independently H, halo, Me, OMe, CF3; T = bond, phenylene, 5- or 6-membered heterocycle containing 1-3 hetero atoms; R3b = H, CONR8R9, SO2R8R9, CO2H, CO2(C1-6 alkyl), NR2SO2R9, NR2CONR8R9, NR2SO2NR8R9, NR2COR9, imidazolyl, thiazolyl, tetrazolyl; R4, R5 = independently H, (un) substituted C1-6 alkyl; R6 = H, C1-6 alkyl; R6CR2c = C3-8 ring; R50 =(un) substituted morpholino, piperazino, C3-7 cycloalkyl, C1-6 alkyl; M = CO, SO2; A = bond,  $Z1(CH2) \times CR7R7a(CH2) y$ ; Z1 = NR2, O, bond; R7, R7a =independently H, CF3, Ph, (un)substituted C1-6 alkyl; R8 = H, (un)substituted C1-6 alkyl; R9 = H, (un)substituted C1-6 alkyl, Ph, thiazolyl, imidazolyl, furyl, thienyl], are growth hormone releasing peptide mimics. Heterocyclic dipeptide derivs. I are useful for the treatment and prevention of osteoporosis (no data). Thus, condensation of Boc-D-Ser(CH2Ph)-OH (Boc = Me3CO2C) with  $4-(2-\infty -1-benzimidazolinyl)$  piperidine, followed by deprotection, coupling with BocNHCMe2CO2H, and deprotection with HCl gave dipeptide amide salt II.

IT 185055-83-8P 185056-28-4P 185056-29-5P 185056-30-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of growth hormone-releasing dipeptides)

RN 185055-83-8 CAPLUS

CN Propanamide, N-[2-[4-[(acetylamino)methyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-amino-2-methyl-, (R)- (9CI) (CA INDEX NAME)

RN 185056-28-4 CAPLUS

CN 4-Piperidinecarboxamide, N-(4-hydroxybutyl)-1-(2-methylalanyl-D-tryptophyl)-4-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 185056-29-5 CAPLUS

CN 4-Piperidinecarboxamide, 1-(2-methylalanyl-D-tryptophyl)-4-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 185056-30-8 CAPLUS

 $\hbox{CN} \qquad \hbox{$4$-Piperidine carboxamide, N-ethyl-1-(2-methylalanyl-D-tryptophyl)-4-phenyl-1-(2-methylalanyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-1-(2-methylalanyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-1-(2-methylalanyl-D-tryptophyl-D-t$ 

, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 185057-33-4P 185058-50-8P 185058-51-9P 185058-52-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of growth hormone-releasing dipeptides)

RN 185057-33-4 CAPLUS

CN Carbamic acid, [2-[[2-[4-[(acetylamino)methyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]amino]-1,1-dimethyl-2-oxoethyl]-, 1,1-dimethylethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 185058-50-8 CAPLUS

CN Carbamic acid, [2-[[2-[4-[[(4-hydroxybutyl)amino]carbonyl]-4-phenyl-1-piperidinyl]-1-(1H-indol-3-ylmethyl)-2-oxoethyl]amino]-1,1-dimethyl-2-oxoethyl]-, 1,1-dimethylethyl ester, (R)- (9CI) (CA INDEX NAME)

RN 185058-51-9 CAPLUS

CN Carbamic acid, [2-[[2-[4-(aminocarbonyl)-4-phenyl-1-piperidinyl]-1-(1H-indol-3-ylmethyl)-2-oxoethyl]amino]-1,1-dimethyl-2-oxoethyl]-, 1,1-dimethylethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 185058-52-0 CAPLUS

CN Carbamic acid, [2-[[2-[4-[(ethylamino)carbonyl]-4-phenyl-1-piperidinyl]-1-(1H-indol-3-ylmethyl)-2-oxoethyl]amino]-1,1-dimethyl-2-oxoethyl]-, 1,1-dimethylethyl ester, (R)- (9CI) (CA INDEX NAME)

L3 ANSWER 83 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1997:26293 CAPLUS  $\underline{Full-text}$ 

DOCUMENT NUMBER: 126:60362 ORIGINAL REFERENCE NO.: 126:11861a

TITLE: Preparation of heterocyclic dipeptide derivatives

which promote release of growth hormone

INVENTOR(S): Carpino, Philip A.; Jardine DaSilva, Paul A.; Lefker,

Bruce A.; Ragan, John A.

PATENT ASSIGNEE(S): Pfizer, Inc., USA

SOURCE: PCT Int. Appl., 158 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA'	PATENT NO.					KIND		DATE		APPLICATION NO.					DATE		
						_								_			
WO	WO 9635713 W: CA, FI, JE					19961114			WO	1995-	IB333	3	19950508			508	
	W:	CA,	FΙ,	JP,	MX,	US											
	RW:	AT,	BE,	CH,	DE,	DK,	, ES,	FR,	GB, G	R, IE,	ΙΤ,	LU,	MC,	NL,	PT,	SE	
AU	9654	554			Α		1996	1212	AU	1996-	54554	4		1	9960	528	
PRIORIT	Y APPI	LN.	INFO	.:					WO	1995-	IB333	3	j	A 1	9950	508	
									WO	1995-	IB410	О	i	A 1	9950	529	

OTHER SOURCE(S): MARPAT 126:60362

GI

AΒ Title compds. I [Z = COCR1R2cLCOANR4R5; L = NR6, O, CH2; W = H; W and X = COCR1R2cLCOANR4R5; L = NR6, O, CH2; W = H; W = H;benzo fusion optionally substituted with 1-3 R3a, TR3b, or R12; Y = H, C1-6 alkyl, C3-10 cycloalkyl, aryl optionally substituted with 1-3 R3a, R3b, or R12; X = OR2, R50MN(Aryl), R8R9NCO, R2bO2C, optionally substituted carbobicyclic or heterobicyclic ring; R1 = optionally substituted C1-10 alkyl, aryl, etc.; R2c = H, C1-6 alkyl, C3-7 cycloalkyl; CR1R3c = optionally substituted C3-8 ring; R2 = H, C1-6 alkyl, C3-7 cycloalkyl; R2a = H, C1-6 alkyl; R2b = H, C1-8 alkyl, C1-8 halogenated alkyl, C3-8 cycloalkyl, alkylaryl, aryl; R3a, R12 = independently H, halo, Me, OMe, CF3; T = bond, phenylene, 5- or 6-membered heterocycle containing 1-3 hetero atoms; R3b = H, CONR8R9, SO2R8R9, CO2H, CO2(C1-6 alkyl), NR2SO2R9, NR2CONR8R9, NR2SO2NR8R9, NR2COR9, imidazolyl, thiazolyl, tetrazolyl; R4, R5 = independently H, optionally substituted C1-6 alkyl; R6 = H, C1-6 alkyl; R6CR2c = C3-8 ring; R50 = optionally substituted morpholino, piperazino, C3-7 cycloalkyl, C1-6 alkyl; M = CO, SO2; A = bond,  $Z1(CH2) \times CR7R7a(CH2) y$ ; Z1 = NR2, O, bond; R7, R7a = COindependently H, CF3, Ph, optionally substituted C1-6 alkyl; R8 = H, optionally substituted C1-6 alkyl; R9 = H, optionally substituted C1-6 alkyl, Ph, thiazolyl, imidazolyl, furyl, thienyl], are growth hormone releasing peptide mimics. Heterocyclic dipeptide derivs. I are useful for the treatment and prevention of osteoporosis. Thus, condensation of Boc-D-Ser(CH2Ph)-OH(Boc = Me3CO2C) with 4-(2-oxo-1-benzimidazolinyl) piperidine, followed by deprotection, coupling with BocNHCMe2CO2H, and deprotection with HCl gave dipeptide amide salt II.

IT 185055-83-8P 185056-28-4P 185056-29-5P 185056-30-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and growth hormone releasing activity of heterocyclic dipeptide derivs.)

RN 185055-83-8 CAPLUS

CN Propanamide, N-[2-[4-[(acetylamino)methyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-2-amino-2-methyl-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 185056-28-4 CAPLUS

CN 4-Piperidinecarboxamide, N-(4-hydroxybutyl)-1-(2-methylalanyl-D-tryptophyl)-4-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

RN 185056-29-5 CAPLUS

CN 4-Piperidinecarboxamide, 1-(2-methylalanyl-D-tryptophyl)-4-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 185056-30-8 CAPLUS

CN 4-Piperidinecarboxamide, N-ethyl-1-(2-methylalanyl-D-tryptophyl)-4-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

IT 185057-33-4P 185058-50-8P 185058-51-9P 185058-52-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and growth hormone releasing activity of heterocyclic dipeptide derivs.)

RN 185057-33-4 CAPLUS

CN Carbamic acid, [2-[[2-[4-[(acetylamino)methyl]-4-phenyl-1-piperidinyl]-2-oxo-1-[(phenylmethoxy)methyl]ethyl]amino]-1,1-dimethyl-2-oxoethyl]-, 1,1-dimethylethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 185058-50-8 CAPLUS

CN Carbamic acid, [2-[[2-[4-[[(4-hydroxybutyl)amino]carbonyl]-4-phenyl-1-piperidinyl]-1-(1H-indol-3-ylmethyl)-2-oxoethyl]amino]-1,1-dimethyl-2-oxoethyl]-, 1,1-dimethylethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 185058-51-9 CAPLUS

CN Carbamic acid, [2-[[2-[4-(aminocarbonyl)-4-phenyl-1-piperidinyl]-1-(1H-indol-3-ylmethyl)-2-oxoethyl]amino]-1,1-dimethyl-2-oxoethyl]-,
1,1-dimethylethyl ester, (R)- (9CI) (CA INDEX NAME)

RN 185058-52-0 CAPLUS

CN Carbamic acid, [2-[[2-[4-[(ethylamino)carbonyl]-4-phenyl-1-piperidinyl]-1-(1H-indol-3-ylmethyl)-2-oxoethyl]amino]-1,1-dimethyl-2-oxoethyl]-,
1,1-dimethylethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L3 ANSWER 84 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1996:641303 CAPLUS Full-text

DOCUMENT NUMBER: 125:275644

ORIGINAL REFERENCE NO.: 125:51548h,51549a

TITLE: Preparation of aryl/heteroaryl-substituted

acylaminoalkanecarboxamides and

acylaminoalkenecarboxamides as neurokinin 1

antagonists

INVENTOR(S): Gerspacher, Marc; Von Sprecher, Andreas; Roggo,

Silvio; Mah, Robert; Ofner, Silvio; Veenstra, Siem Jacob; Betschart, Claudia; Auberson, Yves; Schilling,

Walter

PATENT ASSIGNEE(S): Switz.

SOURCE: PCT Int. Appl., 143 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

						APPLICATION NO.					DATE							
	9626	183			A1		1996	0829		WO	1996-	-EP55	5		1	9960	209	
	W:	AL,	ΑM,	ΑU,	BB,	BG,	BR,	CA,	CN,	CZ	, EE,	FI,	GE,	ΗU,	IS,	JP,	KΡ,	
							MD,										SI,	
							UZ,											
	RW:						UG,					•				-		
		ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF	, CG,	CI,	CM,	GΑ,	GN,	$ ext{ML}$ ,	MR,	
	2213 2213 9646 7015 9607 8109	NE,	SN,	TD,	ΤG													
CA	2213	080			A1		1996	0829		CA	1996-	-2213	080		1	9960	209	
CA	2213	080			С		2007	1113										
AU	9646	233			А		1996	0911		AU	1996-	-4623	3		1	9960	209	
AU	7015	60			В2		1999	0128										
BR	9607	335			А		1997	1125		BR	1996-	-7335	1		1	9960	209	
EP	8109	91			A1					ΕP	1996-	-9018	00		1	9960	209	
	8109						1999											
	R:																	S:
	1175				A		1998 2002	0311		CN	1996-	-1920	94		1	9960	209	
	1081				В													
	9800	051			A2		1998			HU	1998-	-51			1	9960	209	
	9800	051			A3		1998											
JP 	1150	0436			T		1999			JP	1996-	-5253	48		1	9960	209	
	3506				B2		2004								_			
	1788				T		1999											
	2132				T3		1999											
	2883						2001											
	2822 1842						2001											
	9601						2002 1996											
	1172				A A		2001											
	9703				A A		1997											
	9703				A		1997											
	5929						1997											
	3929 APP				Α		エシング	0121				-9133 -8101						
)1/T T ]	LAFF	1111 • .	TMEO	• •								-6101 -EP55						
ER 90	OURCE	(5) •			MARE	ъът	125•	2756		VVO	±	رر بن			VV	<i>,,,</i> ,,,,	200	
11/ 0/	) O I ( C E	(0):			1.Tt.JT./[	ΔI	140;	2,50	17									

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

The title compds. [I; R1 = aryl, heteroaryl; R2 = H, lower alkyl, aryl-lower alkyl; R3 = H, lower alkyl, aryl, heteroaryl; R4 = aryl, heteroaryl; X = C1-C7 alkylene, C2-C7 alkenylene, C4-C7 alkadienylene; Am = = (substituted) NH2], neurokinin NK-1 and substance P antagonists and therefore useful as neurogenic inflammation and tachykinin-induced bronchoconstriction inhibitors, and as CNS agents, were prepared Thus, amidation of pent-2-enoic acid II with 2-(2-pyridyl)ethylamine in the presence of N-ethyl-N'-(3-dimethylaminopropyl)carbodiimide. HCl and DMAP in CH2C12 followed by Bocremoval with TFA in CH2C12 and N-acylation of the amide III with 3,5-(F3C)2C6H3COCl in the presence of Et3N and DMAP in CH2C12 afforded I [R1 = 3,5-(F3C)2C6H3; R2 = Me; R3 = H; R4 = 4-ClC6H4; X = CH:CH; Am = NH(CH2)2(2-pyridyl)]. Compds. I showed, e.g., ED50 of 0.05-1 mg/kg p.o. in vivo in the NK1 bronchospasm test in guinea pigs. Pharmaceutical formulations containing compds. I were given.

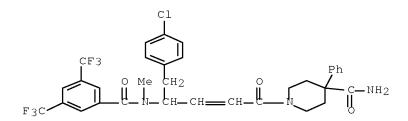
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aryl/heteroaryl-substituted acylaminoalkanecarboxamides and acylaminoalkenecarboxamides as neurokinin 1 antagonists)

RN 182489-78-7 CAPLUS

CN

4-Piperidinecarboxamide, 1-[4-[[3,5-bis(trifluoromethyl)benzoyl]methylamin o]-5-(4-chlorophenyl)-1-oxo-2-pentenyl]-4-phenyl- (9CI) (CA INDEX NAME)



L3 ANSWER 85 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:609954 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 125:247623 ORIGINAL REFERENCE NO.: 125:46285a

TITLE: Preparation of 5-[(4-substituted)piperidin-1-yl]-3-

arylpentanoic acid-derivative tachykinin receptor

antagonists

INVENTOR(S): Bernstein, Peter Robert; Dembofsky, Bruce Thomas;

Jacobs, Robert Toms Zeneca Limited, UK

SOURCE: PCT Int. Appl., 110 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT NO.				KIND DATE		APPLICATION NO.					DATE 							
WO	9624	582			A1		1996	0815		WO 1	996-	 GB25	9		1	9960	208	
	W:	AL,	AM,	AT,	AU,	ΑZ,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	EE,	
		ES,	FΙ,	GB,	GE,	HU,	IS,	JP,	KΕ,	KG,	KP,	KR,	KΖ,	LK,	LR,	LS,	LT,	
		LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NΖ,	PL,	PT,	RO,	RU,	SD,	SE,	
		SG,	SI															
	RW:	KE,	LS,	MW,	SD,	SZ,	UG,	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	
		ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	$\mathrm{ML}_{m{\prime}}$	MR,	
		ΝE,	SN															
CA	2209	832			A1		1996	0815		CA 1	996-	2209	832		1	9960	208	
ΑU	9646	297			Α		1996	0827		AU 1	996-	4629	7		1	9960	208	
ΑU	7142	89			В2		1999	1223										
EP	8083	03			A1		1997	1126		EP 1	996-	9019	04		1	9960	208	
ΕP	8083	03			В1		2001	0620										
	R:	ΑT,	BE,	CH,	DE,					GR,			•			MC,	PT,	IE
CN	1181	069			Α		1998	0506		CN 1	996-	1932	28		1	9960	208	
JP	1051	3191			_		1998	1215		JP 1	996-	5240	72		1	9960	208	
ΑT	2023	42			Τ		2001	0715		AT 1	996-	9019	04		1	9960	208	
ES	2159	717			Т3	I3 20011016 ES 1996-901904 19960208												

	PT	808303	T	20011130	PT	1996-901904		19960208
	ZA	9601069	A	19960812	ZA	1996-1069		19960209
	IN	1996DE00268	A	20050311	IN	1996-DE268		19960209
	FI	9703283	A	19971007	FI	1997-3283		19970808
	ИО	9703652	A	19971008	NO	1997-3652		19970808
	GR	3036639	Т3	20011231	GR	2001-401497		20010918
	JP	2008138007	A	20080619	JP	2007-341959		20071226
PRIO	RIT	Y APPLN. INFO.:			GB	1995-2644	Α	19950210
					JP	1996-524072	АЗ	19960208
					WO	1996-GB259	W	19960208

OTHER SOURCE(S): MARPAT 125:247623

GΙ

$$\mathbb{Q}^{1} \underbrace{\qquad \qquad }_{\mathbb{Q}^{2}} \mathbb{Q}^{4}$$

AB The title compds. (I; Q1-Q4 have the meanings given in the claims; \* = an optionally asym. center) [e.g., N-benzyl-5-(4-hydroxy-4-phenylpiperidino)- 3- (3,4-dichlorophenyl)pentamide; m.p. 64-67°] are nonpeptide antagonists of substance P and NKA (e.g., neurokinin NK1 and NK2 receptors), useful for the treatment of asthma (no data), etc. (no data), are prepared

IT 181876-94-8P 181877-14-5P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 5-[(4-substituted)piperidin-1-yl]-3-arylpentanoic acid-derivative tachykinin receptor antagonists)

RN 181876-94-8 CAPLUS

CN 4-Piperidinecarboxamide, 1-[5-[4-(acetylamino)-4-phenyl-1-piperidinyl]-3-(3,4-dichlorophenyl)-1-oxopentyl]-4-phenyl- (CA INDEX NAME)

RN 181877-14-5 CAPLUS

CN Acetamide, N-[1-[5-[4-[(acetylamino)methyl]-4-phenyl-1-piperidinyl]-3-(3,4-dichlorophenyl)-5-oxopentyl]-4-phenyl-4-piperidinyl]- (CA INDEX NAME)

L3 ANSWER 86 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:596130 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 125:247839

ORIGINAL REFERENCE NO.: 125:46332h,46333a

TITLE: Preparation of substituted heterocyclic compounds as

neurokinin receptor antagonists

INVENTOR(S): Emonds-Alt, Xavier; Grossriether, Isabelle; Gueule,

Patrick; Proietto, Vincenzo; Van Broeck, Didier

PATENT ASSIGNEE(S): Sanofi, Fr.

SOURCE: PCT Int. Appl., 176 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
ES, FI, GB	, AU, AZ, BB, BG, , GE, HU, IS, JP,	WO 1996-FR152 BR, BY, CA, CH, CN, CZ, KE, KG, KP, KR, KZ, LK, MX, NO, NZ, PL, PT, RO,	LR, LS, LT,
RW: KE, LS, MW		BE, CH, DE, DK, ES, FR, BJ, CF, CG, CI, CM, GA,	
FR 2729952 FR 2729952	A1 19960802 B1 19970418	FR 1995-1016	19950130
FR 2729953 FR 2729953	A1 19960802 B1 19970801	FR 1995-8046	19950704
FR 2729954 FR 2729954	A1 19960802 B1 19970801	FR 1995-13005	19951103
IN 186766 CA 2211668	A1 20011103 A1 19960808	IN 1996-DE169 CA 1996-2211668	19960125 19960130
CA 2211668 AU 9646669	C 20050920 A 19960821	AU 1996-46669	19960130
AU 707901 ZA 9600694	B2 19990722 A 19960826		19960130
EP 807111 EP 807111	A1 19971119 B1 20020814		19960130
R: AT, BE, CH IE, SI, LT		GB, GR, IT, LI, LU, NL,	SE, MC, PT,
CN 1172483 CN 1089764	A 19980204 B 20020828	CN 1996-191686	19960130
IL 116957 JP 11507324 JP 3234228	A 19990620 T 19990629 B2 20011204	IL 1996-116957 JP 1996-523308	19960130 19960130
HU 9800295 HU 9800295	A2 19991028 A3 20000228	ни 1998-295	19960130
NZ 301285 RU 2157807 JP 2001131171 JP 2001172279 EP 1156049 EP 1156049	A 20000128 C2 20001020 A 20010515 A 20010626 A1 20011121 B1 20050601	NZ 1996-301285 RU 1997-114938 JP 2000-342606 JP 2000-342571 EP 2001-119949	19960130 19960130 19960130 19960130 19960130
		GB, GR, IT, LI, LU, NL,	SE, MC, PT,

	IE,	SI,	LT,	LV							
AT	222251			T	20020815 20021231	AT	1996-	902305		19960130	
PT	807111			T	20021231	PT	1996-	902305		19960130	
ES	2181866			Т3	20030301	ES	1996-	902305		19960130	
EP	1340754			A1	20030903	EP	2003-	12771		19960130	
	R: AT,	BE,	CH,	DE, D	K, ES, FR,	GB, G	R, IT,	LI, LU,	NL, SI	E, MC, PT,	
	IE,	SI,	LT,	LV							
CZ	293134			В6	20040218	CZ	1997-	2436		19960130 19960130 19960130 19960130	
CN	1502612 127114 294267 296823			A	20040609	CN	2003-	10119883		19960130	
IL	127114			A	20040927	IL	1996-	127114		19960130	
CZ	294267			В6	20041110	CZ	2002-	2243		19960130	
AT	296823			T	20050615	AT	2001-	119949		19960130	
CN	T030303			A	20030/13	CN	2004-	10092931		19960130	
	1156049			T	20051031 20051201	PT	2001-	119949		19960130	
ES	2243373			Т3	20051201	ES	2001-	119949		19960130	
EP	1688416			A1	20060809	EP	2006-	5775		19960130	
					K, ES, FR,						
	IE,	SI.	LT.	LV							
CN	1821241	•	·	А	20060823 20060929	CN	2006-	10008868		19960130	
PL	192164			В1	20060929	PL	1996-	321640		19960130	
EP	1923391			A1	20080521	EP	2007-	150446		19960130	
					K, ES, FR,						
	•	LT,	•	•		,		, ,	·		
FI	9703148			Α	19970929	FΙ	1997-	3148		19970729	
ИО	9703479 308795 1041881 5977359 6242637			А	19970929	NO	1997-	3479		19970729	
NO	308795			В1	20001030						
HK	1041881			A1	20050729		2002-	103621		19980210	
US	5977359			A	19991102	US	1998-	175332		19980210 19981020	
US	6242637			В1	20010605	US	1998-	175331		19981020	
AU	9930133			A	19990819					19990519	
				B2	20010405						
	1321634						2001-	116340		20010411	
				В							
	1321639			A	20011114		2001-	116341		20010411	
	200213808	88		A	20020514	JP	2001-	339406		20011105	
JP	3943369			B2	20070711						
	1394855			B2 A	20030205		2001-	143103		20011207	
PRIORITY					20000200	FR	1995-	1016	А	19950130	
			• •			FR	1995-	8046	A	19950704	
										19951103	
							1996-			19960130	
								10119883		19960130	
								902305		19960130	
								119949		19960130	
							2003-			19960130	
							2006-			19960130	
								116957		19960130	
								523308		19960130	
								342571		19960130	
								593938		19960130	
							1996-		W	19960130	
								820716		19970318	
								100995	AS A	19970316	
OTHER SO	HRCE(S).			МДББЛ	T 125:2478		1000	100000	Λ	17700210	
GI GI	OKCE(D):			T.TILL W	1 120.24/0	J J					
01											

Title compds. [I; A = OCO, CH2OCO, NHCO, OCH2, etc.; R = (hetero)arylmethyl(carbonyl), CHPh2, etc.; R1 = (un)substituted Ph, naphthyl, benzothienyl, etc.; R2 = (CH2)mR3; R3 = e.g., heterocyclic group Q; Z = (hetero)arylimino- or methylmethine, etc.; m = 2 or 3] were prepared Thus, 3,4-C12C6H3CH2CN was alkylated by BrCH2CH2R3 (R3 = 2-tetrahydropyranyloxy) and the product converted in 2 steps to 3,4-C12C6H3C(CN)(CH2OH)CH2CH2R3 (R3 as above) which was cyclocondensed with COC12 to give, in 2 addnl. steps, oxazinone II (R = CH2Ph)(III; R3 = OSO2Me). The latter was aminated by 4-benzylpiperidine to give III (R3 = 4-benzylpiperidino). I had Ki of <10-8M for tachykinin receptors in vitro.

IT 181641-71-4P 181641-83-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of substituted heterocyclic compds. as neurokinin receptor antagonists)

RN 181641-71-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-phenyl-4-[(1-pyrrolidinylamino)carbonyl]-, phenylmethyl ester, monobenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 181641-70-3 CMF C24 H29 N3 O3

CM 2

CRN 98-11-3 CMF C6 H6 O3 S

RN 181641-83-8 CAPLUS

CN 1,4-Piperidinedicarboxylic acid, 4-phenyl-, 1-(phenylmethyl) ester, 4-hydrazide (CA INDEX NAME)

L3 ANSWER 87 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1995:994586 CAPLUS Full-text

DOCUMENT NUMBER: 124:117093

ORIGINAL REFERENCE NO.: 124:21809a,21812a

TITLE: Preparation of N-[(3,4-dichlorophenyl)propyl]piperidin

e selective human NK3-receptor antagonists Bichon, Daniel; Van, Broeck Didier; Proietto, Vincenzo; Gueule, Patrick; Emonds-Alt, Xavier

PATENT ASSIGNEE(S): SANOFI, Fr.

SOURCE: Eur. Pat. Appl., 61 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

PATENT NO.		KIND		APPLICATION NO.	DATE
EP 673928				EP 1995-400590	19950317
EP 673928		B1	20010829		
R: AT,	BE, CH,	DE, D	K, ES, FR,	GB, GR, IE, IT, LI, LU,	MC, NL, PT, SE
FR 2717477		A1	19950922	FR 1994-3193	19940318
FR 2717477		В1	19960607		
FR 2717478		A1	19950922	FR 1994-9478	19940729
FR 2717478		В1	19960621		
FR 2719311		A1	19951103	FR 1995-571	19950119
FR 2719311					
PL 185075		В1		PL 1995-307723	19950316
FI 9501265				FI 1995-1265	19950317
FI 116621					
NO 9501044		A		NO 1995-1044	19950317
AU 9514909				AU 1995-14909	19950317
AU 693845		B2			
ZA 9502228		А			
HU 72065				HU 1995-806	19950317
CN 1128756		A	19960814	CN 1995-103542	19950317
CN 1056605		В			
IL 113026		A			
RU 2143425			19991227		
AT 204863		T			
				PT 1995-400590	
ES 2164746		Т3		ES 1995-400590	
TW 380138			20000121		
CA 2145000		A1	19950919	CA 1995-2145000	19950320

CA 2145000	С	20020507				
JP 08048669	A	19960220	JP	1995-61419		19950320
JP 2922816	B2	19990726				
US 5741910	A	19980421	US	1996-607976		19960229
US 5942523	A	19990824	US	1996-608718		19960229
NO 9705089	A	19950919	ИО	1997-5089		19971104
нк 1005137	A1	20020315	HK	1998-104342		19980519
US 6124316	A	20000926	US	1999-306825		19990507
US 6294537	B1	20010925	US	1999-306821		19990507
PRIORITY APPLN. INFO.:			FR	1994-3193	Α	19940318
			FR	1994-9478	Α	19940729
			FR	1995-571	Α	19950119
			US	1995-405833	А3	19950317
			US	1997-880832	В1	19970623
OTHER SOURCE(S):	CASREA	ACT 124:1170	93: 1	MARPAT 124:117093		

GΙ

The title compds. [I; A = direct bond, CH2, CH2CH2, CH:CH; A1 = AΒ (un) substituted 2-pyridyl or Ph; R1 = Me; R2 = HO, alkoxy, CN, (un) substituted NH2, etc.; R11 = H; such that R1R11 = (CH2)3] (e.g., II; m.p.  $184^{\circ}$ ), useful as human NK3-receptor antagonists (no data) for the treatment of neurokinin Binduced diseases (no data), are prepared

ΙT 167262-69-3P 167263-14-1P 167263-16-3P 172734-14-4P 172734-16-6P 172734-20-2P 172734-44-0P

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of N-[(3,4-dichlorophenyl)propyl]piperidine selective human NK3-receptor antagonists from)

RN 167262-69-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminocarbonyl)-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 167263-14-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(methylamino)carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 167263-16-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(dimethylamino)carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 172734-14-4 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(butylamino)carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$n-BuNH-C$$
 $Ph$ 
 $C$ 
 $OBu-t$ 

RN 172734-16-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(diethylamino)carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 172734-20-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(methoxymethylamino)carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 172734-44-0 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[(1-methylethyl)amino]carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

L3 ANSWER 88 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1995:772578 CAPLUS Full-text

DOCUMENT NUMBER: 123:198629

ORIGINAL REFERENCE NO.: 123:35453a,35456a

TITLE: Preparation of substituted (pyrrolidin-3-

ylalkyl)piperidines as tachykinin antagonists

INVENTOR(S): Burkholder, Timothy P.; Le, Tieu-Binh; Kudlacz,

Elizabeth M.; Maynard, George D.

PATENT ASSIGNEE(S): Merrell Dow Pharmaceuticals Inc., USA

SOURCE: PCT Int. Appl., 238 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
					_									_		
WO 9426	735			A1		1994	1124		WO 1	994-	US44	98		1	9940	422
W:	ΑT,	ΑU,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	ES,	FΙ,	GB,	HU,
	JP,	KP,	KR,	KΖ,	LK,	LU,	LV,	MG,	MN,	MW,	NL,	NO,	NZ,	PL,	PT,	RO,

RU, SD, SE, SK, UA, UZ, VN RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG CA 2160462 19941124 CA 1994-2160462 19940422 Α1 CA 2160462 С 19981215 AU 9469426 Α 19941212 AU 1994-69426 19940422 AU 678023 В2 19970515 EP 696280 A1 EP 1994-917898 19960214 19940422 EP 696280 В1 19970924 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE HU 74085 HU 1995-3153 A2 19961128 19940422 HU 224496 В1 20051028 T JP 09500361 19970114 JP 1994-525453 19940422 JP 3424174 В2 20030707 T AT 158580 19971015 AT 1994-917898 19940422 T3 19980216 ES 2110761 ES 1994-917898 19940422 A 20000726 A 19950112 A 19951130 IL 109496 IL 1994-109496 19940502 ZA 9403091 ZA 1994-3091 19940504 FI 9505258 FI 1995-5258 19951102 B1 20040227 A 19960108 FI 113047 NO 9504400 NO 1995-4400 19951103 В1 NO 309144 20001218 A 19930506 A 19940328 PRIORITY APPLN. INFO.: US 1993-58606 US 1994-218483 US 1994-225371 A 19940419 WO 1994-US4498 W 19940422

OTHER SOURCE(S): MARPAT 123:198629

$$\frac{Y^{1}}{Y^{2}}$$
 $N(CH_{2})_{m}$ 
 $Ar^{1}$ 
 $NG^{2}(CH_{2})_{n}Ar^{2}$ 

Title compds. I (G1, G2 = CH2, CO; m = 2,3; n = 0,1; Ar1, Y2 = (substituted)aryl, (substituted)heterocyclyl; Ar2 = (substituted)Ph or heterocyclyl; Y1 = (substituted)HNCO, (dialkylamino)carbonyl, N-heterocyclylcarbonyl;Y1Y2 together with the C to which they are attached form a substituted spirocyclyl), or stereoisomers, or salts thereof, are prepared I are claimed for treatment of neurogenic inflammatory diseases, asthma, pain, and cough. 3-(3,4-Dichlorophenyl)-3-(2-hydroxyethyl)pyrrolidine (preparation given) was reacted with 2,4-dimethoxybenzoyl chloride to give 3-(3,4-dichlorophenyl)-1-(2,4-dimethoxybenzoyl)-3-(2-hydroxyethyl)pyrrolidine which in 2 steps was converted to I (G1 = H2C, G2 = CO, m = 2, n = 0, Ar1 = 3,4-Cl2C6H3, Ar2 = 2,4-(MeO)2C6H3, Y1 = H2NCO, Y2 = Ph). Tachykinin antagonism was demonstrated.

IT 167262-69-3P 167263-14-1P 167263-16-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of substituted (pyrrolidinylalkyl)piperidines as tachykinin antagonists)

RN 167262-69-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminocarbonyl)-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 167263-14-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(methylamino)carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 167263-16-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[(dimethylamino)carbonyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

L3 ANSWER 89 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1994:605217 CAPLUS Full-text

DOCUMENT NUMBER: 121:205217

ORIGINAL REFERENCE NO.: 121:37365a,37368a

TITLE: 4-(aminomethyl/thiomethyl/sulfonylmethyl)-4-

phenylpiperidine tachykinin receptor antagonists

INVENTOR(S): Macleod, Angus Murray; Stevenson, Graeme Irvine

PATENT ASSIGNEE(S): Merck Sharp and Dohme Ltd., UK

SOURCE: PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 9413639	A1 19940623	WO 1993-GB2535	19931210
W: AU, CA, JP	, US		
RW: AT, BE, CH	, DE, DK, ES, FR,	GB, GR, IE, IT, LU, MC,	NL, PT, SE
CA 2150951	A1 19940623	CA 1993-2150951	19931210

AU 9456573	A	19940704	AU 1994-56573		19931210
AU 682838	В2	19971023			
EP 673367	A1	19950927	EP 1994-902065		19931210
R: AT, BE, CH,	DE, I	DK, ES, FR, G	GB, GR, IE, IT, LI,	LU, N	L, PT, SE
JP 08504435	T	19960514	JP 1993-513951		19931210
US 5661162	A	19970826	US 1995-448622		19950606
PRIORITY APPLN. INFO.:			GB 1992-26014	А	19921214
			GB 1993-13726	А	19930702
			GB 1993-14486	A	19930712
			WO 1993-GB2535	W	19931210

OTHER SOURCE(S): MARPAT 121:205217

GΙ

The title compds. [I; R1, R2 = (un)substituted C1-6 alkyl, alkenyl, alkynyl, halogen, CN, NO2, CF3, etc.; R3 = H, (un)substituted alkylcarbonyl, (un)substituted CO2H, (un)substituted CONH2, etc.; R5-R8 = H, C1-6 alkyl; X = NR4, SO, SO2; R4 = H, alkyl, CHO, Bz, alkylcarbonyl; m = 2-4; n = 0-2 when m = 2-3 and n = 0-1 when m = 4], useful as tachykinin receptor antagonists (no data), are prepared Thus, 4-(2- methoxybenzylaminomethyl)-4-phenylpiperidine dihydrochloride, m.p. 78-80°, was prepared from 4-cyano-4-phenylpiperidine hydrochloride in 4 steps.

IT 158144-81-1P 158144-82-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of tachykinin receptor antagonists)

RN 158144-81-1 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[[(2-methoxyphenyl)methyl]amino]methyl]-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 158144-82-2 CAPLUS

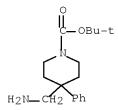
CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

IT 158144-82-2

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, in preparation of tachykinin receptor antagonists)

RN 158144-82-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(aminomethyl)-4-phenyl-, 1,1-dimethylethyl ester (CA INDEX NAME)



L3 ANSWER 90 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1971:22718 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 74:22718

ORIGINAL REFERENCE NO.: 74:3671a,3674a

TITLE: Piperidine derivatives

INVENTOR(S): Nakanishi, Michio; Taira, Yoshihisa PATENT ASSIGNEE(S): Yoshitomi Pharmaceutical Industries, Ltd.

SOURCE: Jpn. Tokkyo Koho, 3 pp.

CODEN: JAXXAD

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
----JP 45028992 B4 19700921 JP 19670916

GI For diagram(s), see printed CA Issue.

AB I, useful as a sedative, analgesic, antispasmodic, and antiinflammatory drug, is manufactured In an example, a mixture of iminodibenzyl, 4-carbamoyl-4-piperidino-1-piperidinecarbonyl chloride, Na2CO3, and C6H6 is refluxed 5 hr to

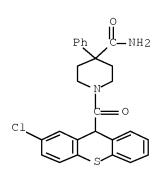
give I (R1 = carbamoyl, R2 = piperidino, X = H, Y = ethylene), m.  $208-9^{\circ}$ . Similarly manufactured are the following I (R1, R2, X, Y, m.p., and % yield given): OH, m-F3CC6H4, H, ethylene,  $185-6^{\circ}$ , 73.0; carbamoyl, piperidino, H, vinylene,  $208-9^{\circ}$ , -; Ac, Ph, H, ethylene,  $158-9^{\circ}$ , -; H, piperidino, H, ethylene,  $132-3^{\circ}$ , -; carbamoyl, Ph, Cl, S,  $119-22^{\circ}$ , -; carbamoyl, piperidino, OMe, S, - (hydrochloride m.  $139-41.5^{\circ}$ ), -; OH, PhCH2, H, ethylene,  $140-2^{\circ}$ , -; CN, Ph, H, ethylene,  $199-201^{\circ}$ , -; OH, m-F3CC6H4, H, vinylene,  $176-7^{\circ}$ , -. 30301-87-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 30301-87-2 CAPLUS

ΤТ

CN Isonipecotamide, 1-[(2-chlorothioxanthen-9-yl)carbonyl]-4-phenyl- (8CI) (CA INDEX NAME)



L3 ANSWER 91 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1970:531014 CAPLUS Full-text

DOCUMENT NUMBER: 73:131014

ORIGINAL REFERENCE NO.: 73:21353a,21356a

TITLE: Piperidine derivatives

INVENTOR(S): Nakanishi, Michio; Taira, Yoshihisa PATENT ASSIGNEE(S): Yoshitomi Pharmaceutical Industries, Ltd.

SOURCE: Jpn. Tokkyo Koho, 4 pp.

CODEN: JAXXAD

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 45025696	В4	19700825	JP	19670616

GI For diagram(s), see printed CA Issue.

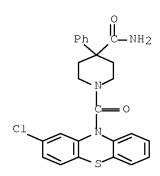
I, useful as tranquilizers, analgesics, antispasmodics, and antiinflammatory drugs, are manufactured by the reaction of II with III. In an example, 1.3 g II (X = H, Y = CH2CH2, R = Cl) and 1.06 g III (R1 = CONH2, R2 = piperidino) in 40 ml EtOH are refluxed 3 hr with 0.72 ml NEt3 to give 1.9 g I (X = H, Y = CH2CH2, R1 = CONH2, R2 = piperidino), m. 208-9° (PhMeligrine). Similarly prepared are the following I (X, Y, R1, R2, m.p., and % yield given): H, CH2CH2, OH, m-CF3C6H4, 185-6°, 91; H, CH2CH2, CN, Ph, 199-201°, 94.5; H, CH2CH2, OH, PhCH2, 140-2°, 80; H, CH2CH2, Ac, Ph, 158-9°, 92.5; H, CH2CH2, piperidino, H, 132-3°, 76; H, CH:CH, CONH2, piperidino, 20,-9°, 92.5; H, CH:CH, OH, m-CF3C6H4, 176-7°, 83; Cl, S, CONH2, Ph, 119-22°, 90; OMe, S,

CONH2, piperidino, 139-41.5°, 75.5; CF3, S, Ph, piperidinocarbonyl,  $114-15^{\circ}$ , 80.

IT 29263-95-4P

RN 29263-95-4 CAPLUS

CN Isonipecotamide, 1-[(2-chlorophenothiazin-10-yl)carbonyl]-4-phenyl- (8CI) (CA INDEX NAME)



L3 ANSWER 92 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1951:38847 CAPLUS

DOCUMENT NUMBER: 45:38847
ORIGINAL REFERENCE NO.: 45:6664c-g

TITLE: 4-Aryl-4-aminomethylpiperidines
INVENTOR(S): Kwartler, Charles E.; Lucas, Philip

PATENT ASSIGNEE(S): Sterling Drug Inc.

DOCUMENT TYPE: Patent LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2538107		19510116	US 1946-687216	19460730

AΒ N-Substituted 4-aryl-4-(aminomethyl)piperidines possess value as analgesics, antispasmodics, and sedatives. 4-Cyano-4-phenylpiperidine 55 g. in 400 ml. 15% NH3 in MeOH with 500 lb. H and 20 g. Raney Ni 14 hrs. gave, on vacuum distillation of the filtrate, 47 g. 4-phenyl-4- (aminomethyl)piperidine (I), b4 154° (di-HCl salt, m. 252-4°), also obtained by hydrogenolysis of the 1benzyl derivative (II) of I over Pd sponge. From II 30 g. and H2NCONHNO2 14.4 g. in 450 cc. H2O at 90° was obtained on filtration 19 g. 1-benzyl-4-phenyl-4ureidomethylpiperidine, m. 172-3° (from aqueous Me2CO), converted by hydrogenolysis to 4-phenyl-4-(ureidomethyl)piperidine (III), m. 186-7° (from H2O). Similarly 7.3 g. 1-Me derivative of I, b12.5  $170-2^{\circ}$  (di-HCl salt, m. 287-8°), gave 7 g. 1-Me derivative of III, m. 200-1°, and 11.2 g. I gave 1carbamyl derivative of III, 11 g., m. 205-6°. II 14 and MeSC(:NH)NH2.H2SO4 7 q. in 50 ml. H2O 15 hrs. at room temperature, then 1 hr. at 100°, gave PhCH2N(C2H4)2CPhCH2NHrC(:NH)NH2.0.5H2SO4, m. 122-5° (from H2O); drying at 100° converted it to a vitreous solid, m. about 150°, which analyzed satisfactorily for the above formula. From I 2.8 g. was obtained 3.5 g. H2NC(:NH)-N(C2H4)2CPhCH2NHC(:NH)NH2.H2SO4, m. 363-5° (decomposition). Reaction of the aminomethyl compds. with alkyl chloroformates gave the following 4phenylpiperidines: 1,4-Me(EtOCONHCH2), m. 86-8° 1,4-PhCH2(EtOCONH CH2) HC1

salt, m. 233-5°; 1,4-PhCH2 (MeOCONHCH2) HCl salt, m. 211° (decomposition); 1,4-PhCH2 (PrOCONHCH2) HCl salt, m. 211-3° (decomposition); 1,4-PhCH2 (BuOCONHCH2) HCl salt, m. 208-9° (pH 5.5 for 1% solution); 1,4-PhCH2 (iso-BuOCONHCH2) HCl salt, 227° (pH 6); 1,4-PhCH2 (AmoCONHCH2) HCl salt, 205-6° (pH 5.7 for 0.5% solution); and 1,4-PhCH2 (C6H13OCONHCH2) HCl salt, m. 193-4°. The pH of a 1% aqueous solution of PhCH2N (C2H4) 2-CPhCH2NHAc.HCl, m. 271-3°, was 5.8. Cf. C.A. 45, 669g.

RN 873396-12-4 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(aminocarbonyl)amino]methyl]-4-phenyl- (CA INDEX NAME)

L3 ANSWER 93 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1951:3762 CAPLUS

DOCUMENT NUMBER: 45:3762
ORIGINAL REFERENCE NO.: 45:669g-i

TITLE: 4-Aryl-4-aminomethylpiperidines

PATENT ASSIGNEE(S): Sterling Drug Inc.

DOCUMENT TYPE: Patent LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

4-Cyano-4-phenylpiperidine and H (Ni) form the 4-aminomethyl compound (I), b4 154° (di-HCl salt, m. 252-4°). The 1-Me derivative (II) of I, b12.5 170-2° (di-HCl salt, m. 287-8°), is prepared similarly. II and H2NCONHNO2 (III) form 1-methyl-4-phenyl-4- (ureidomethyl)piperidine (IV), m. 200-1°. I and III form the 1-H2NCO analog of IV, m. 205°. 1-PhCH2 analog (V) of IV, m. 172-3°. V and H (Pd) form 4-phenyl-4-(ureidomethyl)piperidine, m. 186-7°. Acylation of II with EtO2CCl forms the N-EtO2C derivative, m. 86-8°. 1-Benzyl-4-phenyl-4-(aminomethyl)piperidine and chloroformates or acyl chlorides form the HCl salts of the following N-carbalkoxy and acyl derivs. (N-substituent, m.p., and pH of solution given): MeO2C, 211°; EtO2C, 233-5°; PrO2C, 221-3°; BuO2C, 208-9°, 5.5 in 1% solution; iso-BuO2C, 227°, 6 in 1% solution; AmO2C, 205-6°, 5.7 in 0.5% solution; C6H11O2C, 193-4°; Ac, 271-3°, 5.8 in 1% solution

IT 873396-12-4P, 1-Piperidinecarboxamide, 4-phenyl-4-ureidomethyl-

RL: PREP (Preparation) (preparation of)

873396-12-4 CAPLUS

RN

CN 1-Piperidinecarboxamide, 4-[[(aminocarbonyl)amino]methyl]-4-phenyl- (CA INDEX NAME)

L3 ANSWER 94 OF 94 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1948:5791 CAPLUS Full-text

DOCUMENT NUMBER: 42:5791

ORIGINAL REFERENCE NO.: 42:1270f-i,1271a-d

TITLE: Preparation of substituted 4-(aminomethyl)piperidines

and their straight chain analogs

AUTHOR(S): Kwartler, Charles E.; Lucas, Philip

CORPORATE SOURCE: Sterling-Winthrop Research Inst., Rensselaer, NY SOURCE: Journal of the American Chemical Society (1947), 69,

2582-6

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

The following were prepared according to Eisleb (U.S. 2,167,351, C.A. 33, AΒ 8923.1): Et  $\gamma$ -dimethylamino- $\alpha$ -phenylbutyrate, b2 108° (HCl salt, m. 115-17°); γ-diethylamino analog, b3 132-3° (HCl salt, m. 89-90°). 1-Methyl-4-cyano-4phenylpiperidine (36 g.) in 400 cc. 15% MeOH-NH3, hydrogenated 20 hrs. over 10 g. Raney Ni at room temperature/500 lb., gives 66.7% 1-methyl-4-(aminomethyl)-4-phenylpiperidine (I), b12.5 170-2° (HCl salt, m. 287-8°); 1-benzyl analog (II), b0.5 201-2° (HCl salt, m. 229-31°). 4-Cyano-4-phenylpiperidine (b2 145-6°; picrate, m. 205-6°) (55 g.) in 500 cc. 10% MeOH-NH3, hydrogenated 14 hrs. over 20 g. Raney Ni at room temperature/500 lb., gives 47 g. 4-(aminomethyl)-4-phenylpiperidine (III), b4 154° (HCl salt, m. 252-4°); III results also (83.2% yield) by hydrogenating 31 g. II in 78 cc. EtOH and 6 cc. AcOH over 0.5 g. Pd at  $55^{\circ}/40$  lb. 4-Carbethoxy-4-phenylpiperidine b3  $154-5^{\circ}$  (HCl salt, m. 112-13°). II (30 g.) and 14.4 g. nitrourea in 450 cc. H2O, heated at 90° until gas evolution ceases, give 55% 1-benzyl-4-ureidomethyl- 4phenylpiperidine (IV), m.  $172-4^{\circ}$ ; 1-Me analog m.  $200-1^{\circ}$ . III (11.2 g.) and 14 g. nitrourea in 140 cc. H2O, heated 30 min. at 70°, give 80% 1-carbamyl-4ureidomethyl-4-phenylpiperidine (V), m. 205-6° (decomposition). Hydrogenation of IV in EtOH, AcOH, and H2O over PdCl2-C at 50-60°/45 lb. gives 4 g. 4ureidomethyl-4- phenylpiperidine, m. 186-7°; with nitrourea this yields V. 1-Carbamyl-4-carbethoxy-4-phenylpiperidine, m. 119-20°. 1-Diethylamino-3-phenyl-4-ureidobutane m. 83-4°. II (14 g.), 7 g. methylisothiourea sulfate, and 50 ml. H2O, stirred 15 hrs. at room temperature and heated 1 hr. on the steam bath, give 30-2% 1-benzyl-4- (guanidinomethyl)-4-phenylpiperidine sulfate, m. 150°; III gives 47% of the 1-quanyl analog (VI), m. 363-5° (decomposition); 1quanyl-4-carbethoxy-4-phenylpiperidine sulfate (VII), m. 276-7° (decomposition). I (8.16 g.) and 8.3 g. anhydrous K2CO3 in 75 ml. dioxane, treated dropwise with 4.34 g. C1CO2Et in ether and refluxed 90 min., give 45.3% 1-methyl-4-(carbethoxyaminomethyl)-4-phenylpiperidine, m. 86-8°. 2-Phenyl-4-(diethylaminobutyl)guanidine-HI, with 1 mol. H2O, m. 91-3°; pchlorophenyl analog m. 93-5°; 3,4-dichlorophenyl analog, with 1 mol. H2O, m. 122-3°. II (22.4 g.) in 100 ml. C5H5N, treated dropwise with 8.68 g. C1CO2Et in ether, kept 16 hrs. at room temperature, and heated 1 hr. at  $60^{\circ}$ , gives 71% 1-benzyl-4-(carbethoxyaminomethyl)-4-phenylpiperidine-HCl (VIII), m. 232-3° (decomposition); Me ester m. 210.6-11.2° (decomposition); Pr ester m. 219-27° (decomposition); Bu ester m. 208-8.8°; iso-Bu ester m. 226.6-7.4°; hexyl ester m.  $193-4^{\circ}$ . The majority of these compds. show mild spasmolytic action and

neg. analgesic action. The effect against acetylcholine spasms of the isolated rabbit ileum was negligible in all cases. Against BaCl2-induced spasms, VII was approx. 2.5 times as active as papaverine; the remaining compds. were less active. 1-Guanidino-2-phenyl-4-diethylaminobutane sulfate, VI, and VIII were of the same order of activity as papaverine against BaCl2-induced spasms of the isolated virgin guinea pig uterus; all the other compds. studied were less active.

RN 873396-12-4 CAPLUS

CN 1-Piperidinecarboxamide, 4-[[(aminocarbonyl)amino]methyl]-4-phenyl- (CA INDEX NAME)

$$H_2N$$
— $C$ — $NH$ — $CH_2$ — $N$ — $C$ — $NH_2$ 

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